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IDENTIFIERS   *Computer Games

ABSTRACT
        Each of the more than 200 educational software
programs developed by both commercial and public domain sources which
are described is intended for use with one of the four microcomputers
most frequently used for instructional purposes--Atari, Apple, PET,
and TRS-80. These descriptions are offered as a service for those who
are just beginning to learn about microcomputer applications, and are
not evaluations or recommendations. To promote effective use of the
catalog, programs are listed by subject area, including art, business
education, comprehensive (any subject), driver education, foreign
language, language arts, mathematics, music, physical education,
reading, science, social studies, and spelling. Grade level
classifications are given, and descriptions are listed by grade level
clusters (such as K-3), beginning with the lowest grade cluster and
progressing to grade 12. Descriptions are organized in alphabetical
sequence when there is more than one within a single cluster. Title,
subject, grade level, computer system, description, and approximate
cost are listed for each program. Both games and instructional
programs are included. (LMM)

SOFTWARE DESCRIPTIONS

MICRO-COMPUTERS

ATARI
APPLE
PET
TRS-80

James L. Olivero
Staff Development, Ltd.
1982

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DESCRIPTIONS

Currently the BIG-4--Atari, Apple, PET and TRS-80--make up the micro-computers most frequently used for instructional purposes. Software, unfortunately, is often difficult to locate. Presented here are some 200-plus software descriptions representing the BIG-4; the programs were developed both by commercial and public domain sources.

Clearly the listing is no where near complete; moreover the descriptions included here should neither be considered evaluations nor recommendations for purchase. No purchase, indeed, should ever be made before reviewing the software and noting its compatibility with the intended hardware system. The descriptions are offered solely as a service to those who are just beginning to learn about micro-computer applications.

Index

To use the description catalog effectively, the reviewer should:

1) Select the appropriate, alphabetized subject listing, e.g., art, business education, comprehensive, etc.

2) Select the appropriate grade level classification, e.g., K-2, K-6, 2-7. Descriptions are listed by grade level clusters beginning with the lowest grade or grade cluster and progressing to grade 12.

3) Select an appropriate description within a particular grade cluster. Descriptions are organized in alphabetical sequence when there is more than one description within a single cluster.

TITLE: Video Easel

SUBJECT: Art **GRADE LEVEL:** 3-8
SYSTEM: Atari 400/800 (Cassette) (Joystick Controllers)

DESCRIPTION: This program is a unique combination of video art, both computer-generated and user-generated, together with a computerized version of the game of "life."

 The program uses a "main menu" and a "life menu" accessed by keyboard. Detailed user instructions are supplied. The "video art" portion contains a wide variety of options. In the "drawing" mode, one or more joysticks can be used to draw patterns on the screen. "Painting" contains six pre-programmed repeating designs.

APPROXIMATE COST: $39.95

TITLE: _____

SUBJECT: _____ **GRADE LEVEL:** _____
SYSTEM: _____

DESCRIPTION: _____

APPROXIMATE COST: _____

TITLE: _____

SUBJECT: _____ **GRADE LEVEL:** _____
SYSTEM: _____

DESCRIPTION: _____

APPROXIMATE COST: _____

TITLE: Mastertype

SUBJECT: Business Education   GRADE LEVEL: 7-12
SYSTEM: Apple II Plus 48K (Disk)

DESCRIPTION: Learn to type while playing a game. Enenmy words
attack base. Repel or destroy the attackers by typing the word.
Complete with 17 lessons from simple letters through punctuation
marks, plus and editor for making lessons.

APPROXIMATE COST: $39.95

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: Cross Word Puzzler

SUBJECT: comprehensive - any subject   GRADE LEVEL: any grade
SYSTEM: TRS-80 Model I/III 16K (Cassette)

DESCRIPTION: This program generates original cross-word puzzles from
sets of words and definitions. The puzzle is solved by requesting a
clue and then typing in a guess for the associated word.

APPROXIMATE COST: $24.95

TITLE: Data-Plot

SUBJECT: comprehensive - any subject   GRADE LEVEL: any grade
SYSTEM: Apple II Applesoft 48K 3.2 or 3.3 DOS (Disk)

DESCRIPTION: This program plots data in a bar graph, scatter diagrams,
line graph, or pie chart form; all displays may be produced in color. It
can be used to demonstrate graphing and data distributions or as a tool
for analyzing sets of data such as student grades.

APPROXIMATE COST: $59.95

TITLE: Individual Study Center

SUBJECT: comprehensive - any subject   GRADE LEVEL: 1-12
SYSTEM:

DESCRIPTION: This program is designed to drill a person on material from
almost any subject, using any of six different activities. The activities
include games as well as more traditional matching and completion drills
and tests. The user may order prepared data tapes ($5.95 each) in many
subject areas or use an included program to prepare his/her own data.

APPROXIMATE COST: $54.95

TITLE: Mastertype

SUBJECT: comprehensive - any subject   GRADE LEVEL: 6-12
SYSTEM: Apple II Applesoft 48K (Disk)

DESCRIPTION: This program consists of 17 lessons in arcade game format that present typing skills and give practice with them at levels from beginner (where to place fingers) to advanced.

APPROXIMATE COST: $39.95

TITLE: Scripsit

SUBJECT: comprehensive - any subject   GRADE LEVEL: 7-12
SYSTEM: TRS-80 Model I/III (Cassette) (Printer Required)

DESCRIPTION: Scripsit allows a student or teacher to compose and edit text passages on the video display and then to print the copy on a printer in any format desired. Text may be saved for later use on a tape or cassette or, if available, on a diskette.

APPROXIMATE COST: $39.95

TITLE: Word Race

SUBJECT: comprehensive - any subject   GRADE LEVEL: 10-12
SYSTEM: TRS-80 Model I/III 16K (Cassette)

DESCRIPTION: The program displays a race track on which each of two players has a car. The program displays a word and the first player to identify the correct meaning gets to move his/her car one square forward. Wrong guesses retards the player's car one square. The words included with the program are high school level, but may be changed easily.

APPROXIMATE COST: $7.95

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TITLE: Yellow Light

SUBJECT: Driver Education   GRADE LEVEL: 7-12

SYSTEM: Commodore/PET 32K (Disk)

DESCRIPTION: Allows students to experiment with various characteristics of a road intersection having a traffic light, and to determine its safety. The factors which may be varied are intersection width, speed limit, yellow light duration, drivers reaction time and deceleration rate. The program first determines student time to react to a yellow light as he views a car approaching an intersection. It simulates situations defined by the student and computes the "dilemma zone" for each. The dilemma zone is one in which it is neither safe to go nor stop.

APPROXIMATE COST: $34.95

TITLE:

SUBJECT: GRADE LEVEL:

SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE:

SUBJECT: GRADE LEVEL:

SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: __Word Search: Spanish__

SUBJECT: __Foreign Language__   GRADE LEVEL:__Bgnr-Advncd__
SYSTEM: __Atari 400/800 16K (Cassette) (Joystick Controlled)__

DESCRIPTION: __Word Search: Spanish is a 3-program educational package.
The first two programs are joystick controlled and the last is a printer
version that allows the user a hard copy puzzle.__
       __Ten common Spanish words are hidden among a 10X17 letter grid. The
words can be concealed vertically, horizontally, diagonally, forward
and backward. As the user finds the words, the English translation is
shown. Once all the Spanish words in the first program are found, there
are plenty more on the second program (over 300 words between the two).__

APPROXIMATE COST: __$14.95 (Similar programs for the same price are also__
available for French and German)

TITLE: __Spanish, French, Italian, German Vocabulary Drills__

SUBJECT: __Foreign Language__   GRADE LEVEL: __7-12__
SYSTEM: __Apple II Plus 48K (Disk)__

DESCRIPTION: __Provides practice in foreign vocabulary by means of 3 types
of drills: Matching, foreign-English, and English-foreign. The diskette
comes with sample lessons on it; however, the user may enter vocabulary
from any source.__

APPROXIMATE COST: __$24.95__

TITLE: __French Hang-man__

SUBJECT: __Foreign Language__   GRADE LEVEL: __8-10__
SYSTEM: __Apple II 48K DOS 3.2 or 3.3 (Disk)__

DESCRIPTION: __French Hangman gives practice in translating words and
sentences, in both directions, between French and English. Program in-
cludes 50 words on each of six difficulty levels and 25 sentences on each
of seven levels. Students are allowed four wrong responses before the
correct answer is given. After work is completed on a word or sentence,
a cummulative percentage-correct report is given.__

APPROXIMATE COST: __$29.95__

TITLE: ___Alicia-A Spanish Bilingual Reader_____

SUBJECT: ___Foreign Language_____ GRADE LEVEL: ___9-10
SYSTEM: ___Apple 48K DOS 3.2 or 3.3 (Disk)_____

DESCRIPTION: ___The program is a game using passages from "Alice in Wonder-land." It practices translating between Spanish and English. The game offers many sentences on which to work and also the choice of translating from either Spanish or English. In the Alicia program, the target sentence is first displayed in English and the parts are given for Spanish translation. The game allows one letter of each word at a time; blanks are displayed for the corresponding English words. As the user guesses letters, blanks are filled in. If an incorrect letter is guessed the entire word is displayed in correct form. Students may translate sentences

APPROXIMATE COST: ___in either direction. $29.95_____

TITLE: _____

SUBJECT: _____ GRADE LEVEL: _____
SYSTEM: _____

DESCRIPTION: _____
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APPROXIMATE COST: _____

TITLE: _____

SUBJECT: _____ GRADE LEVEL: _____
SYSTEM: _____

DESCRIPTION: _____
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_____

APPROXIMATE COST: _____

TITLE: Language Arts Sequences

SUBJECT: Language Arts   GRADE LEVEL: K-2
SYSTEM: Apple II Plus 48K DOS 3.3

DESCRIPTION: The introductory Language Arts package offers structured drill and practice for students in Letter Recognition and Alphabetization. The sequences provide students with a highly motivating, success-oriented approach to mastering basic skills.

APPROXIMATE COST: $75

TITLE: Letters & Numbers

SUBJECT: Language Arts   GRADE LEVEL: K-1
SYSTEM: PET 8K (Cassette)

DESCRIPTION: Letters & Numbers presents exercises in recognizing upper and lower case letters and numbers. User may choose matching, sequence completion and filling in the missing character drills.

APPROXIMATE COST: $20

TITLE: Alphabet Keyboard

SUBJECT: Language Arts   GRADE LEVEL: K-2
SYSTEM: TRS-80 Model III 32K (Disk)

DESCRIPTION: The program is designed to teach young students to type letters in alphabetical order. Although no attempt is made to teach finger positions or typing skills, the program introduces the student to the computer keyboard. The program is self-pacing and automatic correcting provides immediate feedback.

APPROXIMATE COST: $34.50

TITLE: Customized Alphabet Drill

SUBJECT: Language Arts   GRADE LEVEL: K-2
SYSTEM: TRS-80 Model III 32K (Disk) 3.3 DOS
        Apple II Applesoft 32K (Disk) 3.3 DOS
DESCRIPTION: The program offers help in alphabet sequencing. The 26 letters of the alphabet are included. The program has four levels of difficulty: 1) filling in letters missing in an alphabetical sequence; 2) filling in a letter between two letters; 3) filling in a letter before a given letter and 4) filling in the letters before and after a given letter.

APPROXIMATE COST: TRS-80 $34.50
                  Apple II $34.50

TITLE: Alphabet, Sequence and Alphabetizing

SUBJECT: Language Arts   GRADE LEVEL: K-6
SYSTEM: TRS-80 Model III 32K (Disk)
        Apple II Applesoft 32K (Disk) 3.3 DOS
DESCRIPTION: This program provides drill and practice to help students develop the skills of alphabet sequence using the 26 letters of the alphabet and working with the first, second, third and fourth letters. Directions and sample exercises appear on the display screen. Scoring appears at the end of each lesson.

APPROXIMATE COST: TRS-80 $45
                  Apple II $45

TITLE: Learn to Read

SUBJECT: Language Arts   GRADE LEVEL: 1-3
SYSTEM: TRS-80 Model I 16K

DESCRIPTION: The student is given a sheet containing 20 numbered, small pictures. The program presents a three-lettered word, and the student enters the number of the picture corresponding to the word. If the answer is correct, the next word is presented. If incorrect, the right answer is presented and the next word appears on the screen. The words are reviewed until all the words are correctly matched.

APPROXIMATE COST: $9.95

TITLE: Word Families

SUBJECT: Language Arts   GRADE LEVEL: 1-4
SYSTEM: Apple II Applesoft 48K (Disk)

DESCRIPTION: Word Families gives practice in substituting a letter in a word to spell another word. The teacher may select substitution of the beginning or final consonant or medial vowel. The screen does not change for incorrect responses, but such responses are recorded in the student's disk file. A graphic reinforcer is provided each time the student answers five presentations correctly.

APPROXIMATE COST: $29.95

TITLE: MECC Elementary Volume 2

SUBJECT: Language Arts-Curriculum Area   GRADE LEVEL: 1-6
SYSTEM: Apple II 3.2 DOS 48K (printer required)

DESCRIPTION: Six programs on one diskette provide ready-made spelling lists, crossword puzzles or other word study activities. Teacher may create mazes, crossword puzzles, mixed word lists or weekly spelling lists with simple instructions built into the programs.
    Good documentation comes with the program.

APPROXIMATE COST: $29.95

TITLE: Let's Spell

SUBJECT: Language Arts   GRADE LEVEL: 2-3
SYSTEM: Atari 400/800 8K (Cassette)

DESCRIPTION: Let's Spell is a series of 4 spelling programs designed for the early elementary level. The first 3 programs present 30 words each, and the last is a test of all 90 words.

    The words are presented in groups of 5, using a voice track. The child is shown a word and asked to type it. Then a sentence using the word is given and the student is asked to type in the word (without seeing it on the screen). If a mistake is made, the computer immediately tells the child, and he/she is asked to try again. After completing the first 5 words, a review test is given, and after the child completes the 30-word lessons, another test is given.

APPROXIMATE COST: $14.95

TITLE: Using A or An

SUBJECT: Language Arts   GRADE LEVEL: 2-3
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: Provides a series of ten statements and user is to fill in blanks with appropriate use of A and/or An. Score is maintained for the user.

APPROXIMATE COST: Public Domain

TITLE: MECC Elementary, Volume 5

SUBJECT: Language Arts/Prefixes-Curriculum Area   GRADE LEVEL: 2-5
SYSTEM: Apple II 48K 3.2 DOS

DESCRIPTION: Diskette contains seven lessons on prefixes, with immediate reinforcement. Some color graphics are included. Lessons are in two types--review and teaching. Each prefix is introduced with sufficient examples to be self-teaching. Once started in a particular lesson, the user is pretty much obligated to complete the task.
    Extensive documentations and reproducable worksheets are provided with the program.

APPROXIMATE COST: $29.95

TITLE: Story Telling

SUBJECT: Language Arts   GRADE LEVEL: 2-6
SYSTEM: TRS-80 Model I 16K (Cassette)

DESCRIPTION: Program is designed to practice recalling facts about a very short story. The program presents a short one-paragraph story, then asks six multiple-choice questions about it. As soon as the student answers a question, a new item is presented. A report on number correct is given after the questions. There are two different story formats. Program also randomly changes several adjectives and nouns each time a story is presented. These features make it possible to present multiple exercises which, although similar, involve somewhat different stories.

APPROXIMATE COST: $9.95

TITLE: Tutorial Comprehension

SUBJECT: Language Arts   GRADE LEVEL: 2-6

SYSTEM: TRS-80 Model III 32K (Disk)

        Apple II 32K (Disk) 3.3 DOS

DESCRIPTION: The program provides tutorials and practice lessons in five key comprehension skills: Main Idea Details, Sequence Inference, Critical Reading. All tutorials are written at levels 2 and 3 so vocabulary won't prevent skills mastery. Reading levels in practice range from 2-6. Depending on how quickly students learn, they are directed automatically to either the next tutorial or to more practice.

APPROXIMATE COST: TRS-80 $7.98

                   Apple II $7.98

TITLE: Language/Reading Development Program

SUBJECT: Language Arts   GRADE LEVEL: 2-12

SYSTEM: Apple II Plus DOS 3.3 (Disk)

DESCRIPTION: This series is designed to develop speed while maintaining and improving perception skills, increase concentration, promote spelling and precise response procedures, develop vocabulary through word analogies, develop content area spelling, allow teacher to deveop own spelling and vocabulary lists.

     Includes content words from math, science and social studies.

     Responses require complete, accurate answers, not multiple choice selections. Includes 150 page instruction manual with worksheets, study guides and word lists.

APPROXIMATE COST: Complete Program of 4 Language/Reading Diskettes $250

TITLE: Agreement of Subject and Verb

SUBJECT: Language Arts   GRADE LEVEL: 3-6

SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: Program presents a sentence containing a blank in the place of the verb; it also displays two choices of verbs to complete the sentence and asks the student for his/her choice. Two locomotives, one of student, the other of the computer, are advanced according to the responses. If the student responds correctly, his/her locomotive is advanced. The incorrect answer results in the advancement of the computer's locomotive.

APPROXIMATE COST: $7.95

TITLE: Cub Reporter

SUBJECT: Language Arts   GRADE LEVEL: 3-6
SYSTEM: TRS-80 Model I 16K (Cassette)

DESCRIPTION: This program is designed to help improve reading comprehension. The student plays the role of a cub reporter who goes to a murder scene. The situation is described in play format. The student then answers about eight multiple-choice questions about that situation. Correct answers cause the program to present the next item; incorrect items are followed by the correct answer and then the next question.

APPROXIMATE COST: $9.95

TITLE: Person, Place or Thing

SUBJECT: Language Arts   GRADE LEVEL: 3-6
SYSTEM: Apple Applesoft 32K (Disk)
        TRS-80 16K (Cassette)

DESCRIPTION: This program drills the student on the identification of noun types. A noun is placed in either the box labeled Person or Place or Thing. The student then moves the word to the box giving the word's correct category by pressing the Space Bar and then pressing Enter. Correct answers are rewarded with a new word. Incorrect answers require the student to keep trying until the correct answer is presented. 40 nouns are chosen randomly.

APPROXIMATE COST: Cassette or disk $7.95
                  Six-program disk package $24.95

TITLE: Compu-Read

SUBJECT: Language Arts   GRADE LEVEL: 3-12
SYSTEM: Apple Applesoft 48K (Disk)

DESCRIPTION: This program is intended to improve comprehension and retension. This includes 4 programs: Character Recognition flashes groups of three letters at a chosen speed; the student tries to duplicate them. If successful, program reports this and increases speed on next trial. If answer is incorrect, program repeats the letters and goes on to the next item. High Speed Word Recognition is similar to first program except that is uses full words. Synonyms and Antonyms flashes a word and possible synonyms and antonyms; the object is to type in the correct synonym. Sentence Comprehension flashes a sentence and asks a question about the information contained. If answered correctly, program moves on; if not,

APPROXIMATE COST: answer is given before preceding.
                  $24.95

TITLE: Spelling Package

SUBJECT: Language Arts   GRADE LEVEL: 3-12
SYSTEM: Commodore/PET 8K (Disk)

DESCRIPTION: The spelling package verbally drills students on spelling words chosen by the teacher. This is accomplished with the use of audio tapes prepared by the teacher and played by a computer controlled tape recorder. The user must have an audio cassette tape recorder with a remote jack and a microphone. The Spelling Package includes a tape recorder interface that plugs into the set and controls recorder operation.

APPROXIMATE COST: $89.95

TITLE: Adjective Recognition

SUBJECT: Language Arts   GRADE LEVEL: 4-7
SYSTEM: Apple w/Recorder Applesoft 32K (Disk)

DESCRIPTION: Program displays a sentence then places its first word in a box. The student moves words of the sentence through the box until he/she recognizes an adjective, then presses Enter to indicate recognition. If the student did choose the correct word in the sentence, then the robot on the screen nods yes, and program moves to another sentence. If the response is incorrect, the robot shakes his head, and the student continues searching. Unlimited trials are given.

APPROXIMATE COST: Individually $7.95
                           6 program package $24.95

TITLE: Comma

SUBJECT: Language Arts   GRADE LEVEL: 4-8
SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: This is a game involving comma usage in sentences. The program is a multi-player game. A player is to decide whether or not a comma should follow a given word in a sentence by answering yes or no. On the student's first error, the program gives a set of usage rules (and scores the answer as wrong). On second, incorrect answer, it allows another trial. If still in error, the next student is given a turn on a new sentence. Provisions are included for teacher to enter different sentences. The program reports a player's score after his/her turn and the overall standings at the end.

APPROXIMATE COST: $7.95

TITLE: Subjects

SUBJECT: Language Arts   GRADE LEVEL: 4-8
SYSTEM: Commodore PET (Disk)

DESCRIPTION: This program asks the student to review a set of seven statements and to pick out the subject in the sentence. The student's score is recorded at the end of the program. The use of questions and statements give the user an opportunity to see the subject used in a variety of positions.

APPROXIMATE COST: Public Domain

TITLE: Compu-Spell

SUBJECT: Language Arts   GRADE LEVEL: 4-9
SYSTEM: Apple Applesoft 48K (Disk)

DESCRIPTION: Spelling is practiced while being monitored. The computer presents words in sentence context. The word is then blanked, and the student types it in. The program doesn't respond when incorrect answers are used. The program records performance for up to 60 students in individual disk files and produces reports. Six word disks are provided with 800-1,700 words each.

APPROXIMATE COST: program and one word disk $39.95
additional word disks $19.95 each

TITLE: Smarty the Computer

SUBJECT: Language Arts   GRADE LEVEL: 4-11
SYSTEM: TRS-80 (Disk)

DESCRIPTION: There are three small programs included: Memory Game, Spelling Bee, and Etch-a-Sketch. These games vary in difficulty and the student has a choice of the difficulty. Memory Game is a powerful program which demands strong attention; speed at typing is also beneficial when the user competes against the computer.

APPROXIMATE COST: Public Domain

TITLE: EDU-DISKS (Vocabulary)

SUBJECT: Language Arts   GRADE LEVEL: 4-12
SYSTEM: Apple II Plus, Atari, TRS-80

DESCRIPTION: An exciting interweave of words and graphics, used in a
mutual reinforcement mode. The program provides practice in vocabulary
and other language skills...flexibility designed into three levels of
difficulty.
     The reinforcement approach uses point scoring for raising motivation,
yet the programs are interactive in that they allow for individual vari-
ation of answers whenever appropriate.

APPROXIMATE COST: Unknown

TITLE: Read and Spell

SUBJECT: Language Arts   GRADE LEVEL: 4-12
SYSTEM: TRS-80 (Disk)

DESCRIPTION: This program is essentially a game with different levels
of difficulty. Words are flashed on the screen for a one-second review.
The user is then expected to spell one of the words in the list depending
on the uses offered. The user receives points depending upon the number
of uses required. The student competes against the computer.

APPROXIMATE COST: Public Domain

TITLE: English Usage Exercises

SUBJECT: Language Arts   GRADE LEVEL: 5-8
SYSTEM: TRS-80 Model I or III 16K (Cassette)

DESCRIPTION: These programs drill students in written usage by displaying
sentences containing incomplete adverbs, nouns, verbs, or pronouns and
asking the student to enter the correct endings.

APPROXIMATE COST: $149.95

TITLE: Alpine Skier

SUBJECT: Language Arts

GRADE LEVEL: 5-9

SYSTEM: Apple II or TRS-80 (Disk)

DESCRIPTION: Uses graphics to show a skier negotiating a slalom ski course while improving comprehension skills by requiring the user to 1) determine fact and opinion by identifying which sentence in each pair represents the fact or opinion, 2) read phrases and identify the first part of each phrase as the cause or effect, 3) determine which word or phrase does not belong in each set of 4 or 5 sets of words or phrases and 4) determine whether 2 sentences have the same or different meanings. Difficulty increases as the student progresses.

Each of 4 programs consists of 36 races.

APPROXIMATE COST: Set of 4 programs $113.75

TITLE: Grammar Problems for Practice

SUBJECT: Language Arts

GRADE LEVEL: 5-9

SYSTEM: Apple II Plus 48K DOS 3.3

DESCRIPTION: This series attacks problem areas in homonyms, verbs, pronouns, modifiers and spelling. Each module contains a pre-test, motivating practice, and a post-test.

APPROXIMATE COST: $80 each
Combined Grammar Series $375

TITLE: State & Capitols

SUBJECT: Language Arts

GRADE LEVEL: 5-9

SYSTEM: Commodore/PET (Disk)

DESCRIPTION: There are two formats included in the program. One format is multiple choice and the other is a fill in the blank. In addition to the identification of states and capitols there is also correct spelling required. Correctness is indicated in percentage of correct responses as well as right and wrong answers.

APPROXIMATE COST: Public Domain

TITLE: Tennis Anyone?

SUBJECT: Language Arts   GRADE LEVEL: 5-9
SYSTEM: Apple II or TRS-80 DOS 3.3

DESCRIPTION: While the computer simulates a tennis game the student is asked to select the correct affix from a list given on the screen. A tennis scoring format is used to show the results. There are 6 programs in the total package. The program consists of 18 games--3 rounds of 6 games each, any round of which may be preselected by the students.

APPROXIMATE COST: Individual packages $29.95
                    Total package $170.75

TITLE: Computer Poetry

SUBJECT: Language Arts   GRADE LEVEL: 7-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: The program is written for users who have interests in poetry ranging from great to little, or even unknown. Information about poetry is offered and opportunities to write poetry are made available.

APPROXIMATE COST: Public Domain

TITLE: Crossword Magic

SUBJECT: Language Arts   GRADE LEVEL: 7-12
SYSTEM: Apple Silentype (Requires a printer) 48K

DESCRIPTION: Provides drill on word recognition, vocabulary, spelling, and typing skills. User can supply words from any subject. Crossword Magic automatically interconnects them to form a puzzle.

APPROXIMATE COST: Diskette package with booklet $79.95

TITLE: Junior/Senior High Vocabulary Programs

SUBJECT: Language Arts   GRADE LEVEL: 7-12
SYSTEM: Apple II Plus or Commodore (Disk)

DESCRIPTION: Each vocabulary program contains approximately 30 words which have been rated for grades 7-12. Each time the program is run the computer randomly selects 8 words and asks the student to choose the most appropriate definition from among 5 words. If the student responds incorrectly, the computer puts the word in a sentence and asks the student to use the contextual clue to try again.

APPROXIMATE COST: Jr. High Diskette $180
Sr. High Diskette $180

TITLE: Verbs

SUBJECT: Language Arts   GRADE LEVEL: 7-12
SYSTEM: TRS-80 Model II (Disk)

DESCRIPTION: This program teaches the difference between transitive and intransitive sentences. Illustrates how the questions "who?" and/or "what?" help to make a sentence transitive. Up to 20 statements are offered.

APPROXIMATE COST: Public Domain

TITLE: Anagrams V and VI

SUBJECT: Language Arts   GRADE LEVEL: 9-12
SYSTEM: Commodore/PET Cassette Drive 8K Minimum

DESCRIPTION: Designed to provide a challenge for high school students. The program features large type, displayed clues when needed, match play if desired, adjusted time intervals for answers, and 5 levels of difficulty. Many of the words used are those found in the Microphys Vocabulary and Spelling Programs.

APPROXIMATE COST: $15

TITLE: Readings in Literature

SUBJECT: Language Arts   GRADE LEVEL: 10-12
SYSTEM: Apple Applesoft 32K (Disk)

DESCRIPTION: Program familiarizes student with 27 well-known passages from English literature. Two modes are provided: Familiarization: Presenting two lines of text with one word omitted in second line. The student responds with the first letter of the missing word. If wrong, the program goes into "Hangman" mode for 3 tries at finding the missing word by guessing letters. The graphic display shrinks on each turn. If correct, gives positive feedback, then drops line and shows next line. The Quiz Mode presents one line at a time (no preview). A performance report is given after each mode.

APPROXIMATE COST: $29.95

TITLE: SAT Vocab

SUBJECT: Language Arts   GRADE LEVEL: 11-12
SYSTEM: Commodore/PET (Cassette or Disk)

DESCRIPTION: Provides two different approaches to drilling students in preparation for the vocabulary portions of the Scholastic Aptitude Test. One approach is interactive; the other approach is the "deferred mode" (generating homework assignments and quizzes).

The student is provided with the correct answer if he chooses the wrong one.

APPROXIMATE COST: $10 each or $180 for set of 10

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: Library Skills: What's There and How To Find It

SUBJECT: Library   GRADE LEVEL: 4-12
SYSTEM: Apple II 32K (Applesoft)

DESCRIPTION: At the conclusion of the program, students should be able
to: identify and locate fiction, non-fiction and biographies; use the
Dewey Decimal System to locate non-fiction books, use the card catalogue
to locate books, and know how to locate and use reference books.

APPROXIMATE COST: Unknown

TITLE: Library Skills

SUBJECT: Library   GRADE LEVEL: 4-8
SYSTEM: Apple II Applesoft 32K 3.2 or 3.3 DOS

DESCRIPTION: Introduces and gives practice with various library skills,
including what's there and how to find materials and card catalog.
Exercises are given for reinforcement of understanding. The program
concludes with a mastery quiz for which the results are reported.

APPROXIMATE COST: $24.95

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: ___Count to 30 & Count to ?___

SUBJECT: ___Mathematics (Counting)___   GRADE LEVEL: ___K-1___
SYSTEM: ___Apple II 32K DOS 3.3___

DESCRIPTION: ___This is a counting program for primary only. Symbols appear___
___on the screen in rows of 10. Student may count as the symbols appear.___
___This program could be used for a whole class simultaneously. Teacher___
___may also teach the name of the symbols; $, *, &, etc.___

APPROXIMATE COST: ___Pulbic Domain___

TITLE: ___Hurkle___

SUBJECT: ___Mathematics (Geometry)___   GRADE LEVEL: ___K-3___
SYSTEM: ___Commodore/PET 8K (Cassette)___

DESCRIPTION: ___The goals of this game are to provide practice in the use___
___of a coordinate system, to develop logical thought processes, and to rein-___
___force the concepts of left, right, up and down. The student tries to___
___find the missing Hurkle which is hidden on A 10X10 grid. The student___
___enters his/her guess as a pair of coordinates. The named grid point is___
___lightened, and both visual and auditory clues are given to indicate the___
___direction of the Hurkle's hiding place. When the Hurkle is found, a___
___flashing picture of Hurkle is shown.___

APPROXIMATE COST: ___$5.00___

TITLE: ___The Math Machine___

SUBJECT: ___Mathematics___   GRADE LEVEL: ___K-12___
SYSTEM: ___Apple II Applesoft 48K (Disk)___

DESCRIPTION: ___This program allows the user to practice arithmetic with a___
___game reinforcer. It gives practice in working elementary math problems___
___ranging from pre-math skills to division. Teachers can assign an approp-___
___riate skill level and reinforcement schedule for the student. The student___
___works through the math problems and is then reinforced with a game of his/___
___her choice. If the student gives two consecutive incorrect responses on___
___any problem, the program will respond with the correct answer.___
___Graphics and sound are used extensively throughout the program.___

APPROXIMATE COST: ___$79.95___

TITLE: Anroid Nim

SUBJECT: Mathematics (Game)   GRADE LEVEL: 1-3
SYSTEM: Commodore / PET (Disk)

DESCRIPTION: This program is set up in such a way that the computer competes against the user. The student tries to mainipulate the responses so he/she is able to eliminate the last Nim on a series of three columns.

APPROXIMATE COST: Public Domain

TITLE: Boxes

SUBJECT: Mathematics(Add & Subt/Intro to Algebra) GRADE LEVEL: 1-3
SYSTEM: Apple II 32K DOS 3.3

DESCRIPTION: Students are introduced to algebraic equations using simple single digit addition and substraction problems. Student selects which numbers in the equation will be the unknown. Student selects addition or subtraction. Concept of "1 more" is also demonstrated as the student accumulates "right" answers.
    Color graphics, immediate feedback.

APPROXIMATE COST: Public Domain

TITLE: Hickory-Dickory Clock

SUBJECT: Mathematics   GRADE LEVEL: 1-3
SYSTEM: Atari 400 (Cassette)

DESCRIPTION: This program places the face of a clock on a display screen and the hands are placed at various locations. The student has the options to pick from: Hours, half-hours and minutes. Student can indicate the number of tries he/she would like to take on each of the options.

APPROXIMATE COST: $14.95

TITLE: __Legacy__

SUBJECT: __Mathematics__   GRADE LEVEL: __1-3__
SYSTEM: __Apple Applesoft 32K (Disk)__

DESCRIPTION: __A program designed for practice on multiplication facts in__
__a game format. The player tries to guess the number hidden in a marked__
__box located in a randomly located cell of a 1X9 grid before the computer__
__locks the box. After the program presents the grid and marked box, it__
__positions its own marker in the lower left corner of the grid and begins__
__to search for the marked box. moving box-by-box, row-by-row, up the grid.__
__The player tries to guess the number in the box and type it in. If the__
__player types the correct number before the computer finds the box, the__
__number is added to the player's score; otherwise, the computer scores.__

APPROXIMATE COST: __$19.95__

TITLE: __Making Change__

SUBJECT: __Mathematics (Money)__   GRADE LEVEL: __1-3__
SYSTEM: __Apple II 32K DOS 3.3__

DESCRIPTION: __Program teaches value of dollar, quarter, dime, nickel__
__and penny. Computer presents a problem involving one or more coins and__
__the student must identify alternative coins which total the same amount.__
__The student is not required to make change: Program has built-in help__
__if student misses a conversion.__
__Hi-res. graphics for coin reproduction.__

APPROXIMATE COST: __Public Domain__

TITLE: __Math Dice__

SUBJECT: __Mathematics__   GRADE LEVEL: __1-3__
SYSTEM: __Commodore/PET (Disk)__

DESCRIPTION: __There are two dice displayed on the screen. The computer__
__"throws" the dice and the student adds the numbers on the dice. Helpful__
__when working on number identification and addition using numerals 1-6,__

APPROXIMATE COST: __Public Domain__

TITLE: __Tables 1-12__

SUBJECT: __Mathematics__ GRADE LEVEL: __1-3__

SYSTEM: __Apple II Applesoft 32K__

DESCRIPTION: __This program uses graphics to produce large bold numbers__
__for math drill in the 4 basic operations. The student choses the opera-__
__tion, and either the number of the table to practice or random generations__
__of operands in range 0-17.__

APPROXIMATE COST: __$39.95__

TITLE: __Times__

SUBJECT: __Mathematics__ GRADE LEVEL: __1-3__

SYSTEM: __Commodore/PET 8K (Cassette)__

DESCRIPTION: __The program presents random multiplication facts up through__
__the nines. Correct answers are reinforced. One wrong answer results in__
__one more chance. A second wrong answer results in the correct answer__
__presented, and asks the student to type it in. After each problem, the__
__program reports the number of problems answered correctly and the elapsed__
__time for the most recent problem.__

APPROXIMATE COST: __$7.95__

TITLE: __Atari Safari__

SUBJECT: __Mathematics/Language Arts (Games)__ GRADE LEVEL: __1-4__

SYSTEM: __Atari 800 24K (Joystick controls)__

DESCRIPTION: __Atari Safari is a collection of 25 programs. There are a__
__combination of games and utility programs. The game programs consist of__
__Demolition Derby, Think, Mountain, Black Hole Chase, Lelmans, Luna, Alien,__
__Dynamite and Tic Tac Toe.__
__The utilities include Finance, Math Plot, Unit Conversion, and Math__
__drills in addition, subtraction, multiplication and division. Utility__
__programs all include Shape Builder, Music and Pacifier.__

APPROXIMATE COST: __$38.95__

TITLE: Compu-Math Arithmetic Skills

SUBJECT: Mathematics   GRADE LEVEL: 1-4
SYSTEM: Apple 48K (Disk)

DESCRIPTION: This is a tutorial on 4 basic operations. Step-by-step instructions are given for addition, subtraction, multiplication and division. The student is moved to the next level based on his/her performance. It includes provisions for individually prescribing instructions.

APPROXIMATE COST: $49.95

TITLE: Hurkle

SUBJECT: Mathematics -Intro. to Coordinators   GRADE LEVEL: 1-4
SYSTEM: Apple II 32K DOS 3.3

DESCRIPTION: This is a game using x,y coordinates in a 10X10 grid. A Hurkle is hidden in one of the grids. Color and written clues are given to assist the student in making logical guesses. Student is also introduced to 8 points of the compass. Maximum of 5 guesses allowed.
     Replays indefinitely

APPROXIMATE COST: Public Domain

TITLE: Multiplication

SUBJECT: Mathematics   GRADE LEVEL: 1-4
SYSTEM: TRS-80 Model I/III 16K (Cassette)

DESCRIPTION: The program gives on-screen practice in multiplying whole numbers in the same manner as one would do on paper. User may choose any of 5 difficulty levels. During problem, a blinking cursor indicates the position of the digit to be entered. The student may either enter a digit or ask for help in finishing the problem. An end-of-session report gives the number of problems worked correctly with/without help.

APPROXIMATE COST: $74.95

TITLE: ___Apple Barrel___

SUBJECT: Math, Counting/Estimating   GRADE LEVEL: ___1-5___

SYSTEM: ___Apple II Plus   32K   3.3 DOS   (Disk)___

DESCRIPTION: Color graphics are used to establish a simulation
   in which "Farmer John" collects his apples in a barrel but needs
   someone to tell him "how many." User may use any math function
   to derive the answer.
        Could be used for small group drill. The size of the barrel
   is selected by the user. This determines the level of difficulty
   for each problem.

APPROXIMATE COST: ___Public Domain___

TITLE: ___Clock___

SUBJECT: Mathematics   GRADE LEVEL: ___1-5___

SYSTEM: ___Apple II   (Applesoft)   48K   3.3 DOS   (Disk)___

DESCRIPTION: This program provides practice with clocks in three
   modes: setting the hands of a clock from digital time; reading
   a clock and typing the digital time; setting clock hands from
   time given in words.
        Each mode can be given in any of five difficulty levels
   which are based on the precision with which an answer must be
   given; this ranges from level 1 (time correct to one hour) to
   level 5 (time correct to one minute).

APPROXIMATE COST: ___$49.95___

TITLE: ___Math Pak I___

SUBJECT: Mathematics   GRADE LEVEL: ___1-5___

SYSTEM: ___TRS-80   Model I   16K   (Casette)___

DESCRIPTION: The package contains one program for each of four
   basic arithmetic operations on whole numbers. All operate
   more or less like addition which is as follows. First, questions
   to specify problem difficulty are answered. Then, 10 problems
   are displayed. The program accepts a result, digit by digit
   at the bottom of the screen. If a digit is correct, it is filled
   in under the problem. If a digit is incorrect the
   problem so states and gives another chance--up to five trials per
   digit. If student's score is 90 or better, s/he is rewarded with
   a game of "Bomber."

APPROXIMATE COST: ___$14.95___

TITLE: _____ Pizza _____

SUBJECT: _____ Math--Intro. to Coordinates _____ GRADE LEVEL: 1-5
SYSTEM: _____ Apple II Plus 32K 3.3 DOS (Disk) _____

DESCRIPTION: A simple 4X4 grid is used to locate 16 homes in Kahii.
The students' pizza parlor must deliver to these homes. The
driver asks "Where?" and the user must give coordinates.
        Suitable for small groups. Essentially, student is introduced to
the concept of x,y coordinates in an amusing format.

APPROXIMATE COST: _____ Public Domain _____

TITLE: _____ Supermath _____

SUBJECT: _____ Math, Basic Functions _____ GRADE LEVEL: 1-5
SYSTEM: _____ Apple II Plus 32K 3.3DOS (Disk) _____

DESCRIPTION: This is a low-level basic math program using color.
Teacher or student may select function and level of difficulty
(0-99). If level is not selected then program will locate
student level by presenting progressively harder problems.
Difficulty then progresses a level at a time. If user errors
three times on one problem, the program backs off one level,
then proceeds with random examples.

APPROXIMATE COST: _____ Public Domain _____

TITLE: _____ Addition and Subtraction _____

SUBJECT: _____ Mathematics _____ GRADE LEVEL: 1-6
SYSTEM: _____ Commodore/PET 8K (Cassette) _____

DESCRIPTION: The program practices adding or subtracting one-to-seven
digit numbers. The addition and subtraction programs are two
separate products. The products are similar except for the type
of arithmetic operations involved and the number of difficulty levels
provided.
        Teacher can specify a variety of parameters such as with or without
marked carry, regrouping, etc. Problems in the program are displayed
in vertical orientation. Thus, students enter answers from right
to left. Graphic feedback is given.

APPROXIMATE COST: _____ $20.00 _____

TITLE: Working With Basic Multiplication Facts

SUBJECT: Mathematics   GRADE LEVEL: 1-6
SYSTEM: Commodore/PET   8K   (Cassette)

DESCRIPTION: Program is a timed drill on multiplication facts, 0-9. Each lesson consists of 15 problems generated randomly except question answered correctly is not repeated. The learner may choose to drill on multiplication generally or on a certain number. At the end of each lesson, student performance is reported in terms of: number of problems, errors, and answers given by the computer; response time; total lesson time; and identity of troublesome problems.

APPROXIMATE COST: $7.95

TITLE: EDU-DISKS

SUBJECT: Math   GRADE LEVEL: 1-7
SYSTEM: Apple II Plus, Atari, TRS-80

DESCRIPTION: Designed to enhance a standard mathematics program for grades one to seven. The disks also serve for remedial testing on a middle school or secondary level. Though independent of texts, they are correlated into the ten leading mathematics texts. The program format includes pretest, practice and post-tests for each segment.

APPROXIMATE COST: Two Diskettes, 24 page Teacher's Guide and Correlation Disk======$876.00

TITLE: California School for Deaf, Math Drill

SUBJECT: Mathematics   GRADE LEVEL: 1-8
SYSTEM: Apple II Plus, 32K 3.3 DOS   (Disk)

DESCRIPTION: An outstanding math drill program utilizing color text and very large letters and numerals. There are four levels each of addition, subtraction, multiplication and division. Student selects functions, level and time to solve each problem. All problems in horizontal format.

APPROXIMATE COST: Public Domain

TITLE: Math A-Drill

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SUBJECT: Math, Drill--Advanced   GRADE LEVEL: 1-8
SYSTEM: Apple II Plus 32K 3.3 DOS (Disk)

DESCRIPTION: An extension of Math Drill. Provides additonal drill
opportunities. At the culmination of each drill session the
user gets results expressed in %. If student selects too hard
a drill sequence (misses three problems in a row), the program
returns to start.
        Uses negative numbers. All problems presented as algebraic
equations.

APPROXIMATE COST: Public Domain

TITLE: Mathematics

SUBJECT: Mathematics   GRADE LEVEL: 1-8
SYSTEM: Apple II Plus 48K 3.3DOS (Disk

DESCRIPTION: The revised Math Sequences package offers instruction as
well as structured drill and practice. The following sequences are
included: Numbers Readiness, Addition, Subtraction, Multiplication,
Division, Laws of Arithmetic, Integers, Fractions, Decimals, Percents,
Equations, and Measurement Formulas. Problem levels are small,
sequential steps which increase in difficulty. Problem levels are
precisely defined so studnets may be easily placed at a level
which challenges their abilities. As students demonstrate
mastery or failure, the computer moves them up or down a level.

APPROXIMATE COST: 12 Diskettes $450

TITLE: Mathematics Drill and Practice

SUBJECT: Math   GRADE LEVEL: 1-8
SYSTEM: Apple II 48K (Disk)

DESCRIPTION: The package contains 14 diskettes covering mathematics
concepts taught in grades 1-8. Type of instruction varies from
drill and practice to introduction and development of math ideas.
Package contents include addition, subtraction, multiplication,
division, common fractions, measurement, geometry, elementary
algebra and decimal fractions. Designed to augment math
instruction.

APPROXIMATE COST: Price Unknown

TITLE: ___Drill___

SUBJECT: Math   GRADE LEVEL: 2-4
SYSTEM: Commodore/PET   (Disk)

DESCRIPTION: Fundamental problems in drill and practice are
    available in addition, subtraction, multiplication and division.
    The computer keeps score for the user. Two can play against each
    other or against time. Having a scratch pad and pencil handy
    is advised when working the program.

APPROXIMATE COST: Public Domain

TITLE: ___Match the Number___

SUBJECT: Math   GRADE LEVEL: 2-4
SYSTEM: Commodore/PET   (Disk)

DESCRIPTION: The screen displays three or four options which show
    a number of items--up to 9--and the student is to pick the
    matching choice. Correct responses are rewarded with a happy
    face; incorrect responses display unhappy faces.

APPROXIMATE COST: Public Domain

TITLE: ___Math Drill___

SUBJECT: Math   GRADE LEVEL: 2-5
SYSTEM: TRS-80 Model II (Disk)

DESCRIPTION: Addition, subtraction, multiplication and division
    are included in this program. The computer generates the problems
    and the user computes an answer on a separate note pad. The
    student matches answers with the computer.

APPROXIMATE COST: Public Domain

TITLE: __Addition With Carry__

SUBJECT: __Math__   GRADE LEVEL: __2-8__
SYSTEM: __Atari 400/800 8K (Cassette) (Joystick Controlled)__

DESCRIPTION: __Additon With Carry is an arithmetic drill program. The__
__program is joystick controlled. The software is designed for__
__younger students already familiar with the "carry" concept. Problems__
__range from two single-digit numbers to seven five-digit numbers.__
__The computer prompts the student with a "?". If the answer is__
__correct, the computer places a "1" in the next row. If not, the__
__incorrect answer disappears, the "?" returns, and the student must__
__try again. There are five levels of difficulty. The computer__
__keeps track of the number of incorrect answers and a percent score.__

APPROXIMATE COST: __$14.95__

TITLE: __Computer Chess__

SUBJECT: __Mathematics__   GRADE LEVEL: __2-10__
SYSTEM: __Atari 400/800 (Cartridge) (Joystick Controlled)__

DESCRIPTION: __Chess is played against the computer. Eight computer__
__skill levels are available. In the easiest level, the computer only__
__"thinks" about its next move for about 15 seconds. In the most__
__difficult level, the computer can take up to 10 hours for a__
__single move. Computer chess follows the basic moves of standard__
__chess, including "castleing" and "en passant". It is also possible to__
__promote the pawn by advancing it to the opposite side of the__
__board.__

APPROXIMATE COST: __$39.95__

TITLE: __Apple Array__

SUBJECT: __Mathematics -- Multiplication__   GRADE LEVEL: __3-6__
SYSTEM: __Apple II Plus 32K 3.3 DOS (Disk)__

DESCRIPTION: __This is an extension of "Apple Barrel" except__
__that apples fall into the barrel in uniform rows so that__
__multiplication becomes the logical function.__
__The program can be used by the student with little or no__
__teacher guidance.__

APPROXIMATE COST: __Public Domain__

TITLE: Cash Register

SUBJECT: Math   GRADE LEVEL: 3-6
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: The student pretends to run a cash register at a local
grocery store. A purchase is made and change is given. Change
can be given in any denomination, but total must be correct.
Problems are presented in story fashion.

APPROXIMATE COST: Public Domain

TITLE: Story Problems in Addition and Subtraction

SUBJECT: Mathematics   GRADE LEVEL: 3-6
SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: Simple word problems are presented involving whole
number additon and subtraction. About 14 story problems are
presented. The problems involve 3 or 4 situations. The student
may answer or ask for the right answer. Correct answers are
rewarded with a happy face; an incorrect answer is furnished with
a monster. A performance report, including elapsed time, is
given at the session end.

APPROXIMATE COST: $7.95

TITLE: Take It

SUBJECT: Mathematics   GRADE LEVEL: 3-7
SYSTEM: Apple II (Applesoft) 32K (Disk)

DESCRIPTION: This is a drill on signed number arithmetic in game
format. The game is timed, testing student's usage of the four basic
arithmetic operations. The player has a choice of one operation or
a mixture of all four. The computer presents a problem. The
player computes the answer and then may take it or leave it for
the computer, but must do so before his or her time is up. The student
who is too late has the decision made by the machine. The
over-all score is reported after each problem. Problem difficulty
is adjusted based on student performance.

APPROXIMATE COST: $19.95

TITLE: _____Find the Factors_____

SUBJECT: __Math_____ GRADE LEVEL: __3-8__

SYSTEM: ___Commodore/PET 8K (Cassette)_____

DESCRIPTION: _The program allows practice in finding two numbers_
   given their sum and product of the two numbers. If correct
   numbers are entered in the first four trials, the program reports
   correct and presents a new problem. If neither number is
   entered, the program gives one of the numbers; the other is
   given if not found after four more trials. If two numbers
   are entered which give either the sum or the product but
   not both, the student is so informed. Two difficulty levels are
   provided: operands 1-10 and 1-100, respectively.

APPROXIMATE COST: __$7.95__

TITLE: _____Mastermind_____

SUBJECT: __Math -- Logic_____ GRADE LEVEL: __3-8__

SYSTEM: ___Apple II Plus 32K 3.3 DOS (Disk)_____

DESCRIPTION: __Student must guess both the color and the location_
   of four colors in a line. Program gives clues to assist in making
   logical choices. There are six colors to chose from. Student
   may select one to four colors at a time. Multiple variables
   make this a fairly difficult exercise.

APPROXIMATE COST: __Public Domain__

TITLE: _____Othello_____

SUBJECT: __Math--Coordinates, Logic_____ GRADE LEVEL: __3-8__

SYSTEM: ___Apple II Plus, 32K 3.3 DOS (Disk)_____

DESCRIPTION: _This is a strategy game played on an 8X8 grid. The_
   user challenges the computer by trying to trap the opposite
   color on the grid. This is a very long game. The computer reacts
   very slowly. The game cannot be completed in just a few minutes.

APPROXIMATE COST: ___Public Domain__

TITLE: Postperson's Route

SUBJECT: Math   GRADE LEVEL: 3-10
SYSTEM: Commodore/PET   (Disk)

DESCRIPTION: The computer produces a route on the screen and by
manipulating the censor one must track a route. Levels of
difficulty range from 1-10. More difficult routes require
considerable pre-planning.

APPROXIMATE COST: Public Domain

TITLE: Yahtzee

SUBJECT: Math (game)   GRADE LEVEL: 3-10
SYSTEM: Commodore/PET   (Disk)

DESCRIPTION: Five dice are presented on the screen and the user
competes against the computer to record competitive scores. There
are a variety of logical (and chance) decisions that must be
made. Helpful to have familiarity with regular game when playing
computer version for the first few times.

APPROXIMATE COST: Public Domain

TITLE: Multiplication Drill

SUBJECT: Math   GRADE LEVEL: 3-12
SYSTEM: Commodore/PET   (Disk)

DESCRIPTION: This program gives students considerable drill practice
in multiplication, especially using two digit numbers. The user
competes against the computer--both in terms of accurate answers
and time taken for a response. Cues are given when
answer is incorrect.

APPROXIMATE COST: Public Domain

TITLE: Factor

SUBJECT: Math   GRADE LEVEL: 4-7
SYSTEM: TRS-80 16K (Cassette)

DESCRIPTION: The program is designed for students to practice
factoring and identifying primes in game format. Ordinal
numbers are presented, starting with 1 and ending with number
chosen by student. Student and program take turns. On the
student's turn, s/he is asked to pick a number, trying to get
the largest one whose factors remain on a predetermined list.
The number selected is added to the student's score. Then,
the taxman in the program gets the factors of the student's
numbers that remain.

APPROXIMATE COST: $7.95

TITLE: Metric Roadrunner

SUBJECT: Math   GRADE LEVEL: 4-7
SYSTEM: TRS-80 Model I 16K (Cassette)

DESCRIPTION: This program is in a game format and is used to
practice estimating distances in centimeters. Coyote and Roadrunner
shapes are placed on the screen in random locations. The student
tries to make the Coyote "catch" the Roadrunner by estimating and
typing in the distance between the two shapes -- so many
centimeters up or down and/or right and left. If the student
misses the distance, the program relocates both shapes and the
student tries again. If student answers correctly, the program
gives a vibrating message and chance to try again.

APPROXIMATE COST: $7.95

TITLE: Sets

SUBJECT: Mathematics   GRADE LEVEL: 4-7
SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: Program allows practice in finding the union and
intersection of two sets. The program presents two sets
consisting of letters and asks for their union and intersection.
If students answers correctly, the program so indicates and
goes on to the next question. If the student is incorrect, the
right answer is given, and the next problem is presented. An
optional review lesson is available to introduce or review the
set concept. The programs reports student performance after 10
problems.

APPROXIMATE COST: $19.95

TITLE: Sets and Numbers

SUBJECT: Math   GRADE LEVEL: 4-7

SYSTEM: TRS-80 Model I (Level II BASIC) 16K (Cassette)

DESCRIPTION: Students acquire practice with sets and number sentences. The program presents a scored pre-test followed by optional practice on sets and number sentences. The program presents a problem, then accepts a number referring to the answer. If answer is correct, program continues. If incorrect, the program states the problem again; it allows unlimited trials. There is no performance report except on the pre-test.

APPROXIMATE COST: $24.95

TITLE: Compu-math Fractions

SUBJECT: Math   GRADE LEVEL: 4-8

SYSTEM: Apple (Applesoft) 32K (Disk)

DESCRIPTION: Seven programs involving a pre-test and tutorials in fractions, definitions, common and lowest denominators, adding and subtracting, multiplication and division. The pre-test is multiple choice with items from all parts of the unit; it ends with a report and recommendation for placement of student within a unit.

APPROXIMATE COST: $39.95

TITLE: MECC--Elementary Vol. 3, Version 4.5

SUBJECT: Math, Social Studies   GRADE LEVEL: 4-8

SYSTEM: Apple II Plus 48K 3.2DOS (Disk)

DESCRIPTION: Civil is a simulation of fourteen Civil War battles. Students decide how to allocate funds and other resources and what battle strategies to use. States and States 2 are drill programs for learning states and capitals.
Four Sell programs combine math concepts and business simulations. Programs demonstrate the influence of advertizing, finding the optimum price for a product and marketing techniques.

APPROXIMATE COST: $29.95

TITLE: Fractions + and -

SUBJECT: Math   GRADE LEVEL: 4-8
SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: This program is designed for students to practice adding
and subtracting fractions. The program presents randomly generated
problems involving addition and subtraction of fractions. It
accepts the final result in two pieces: numerator, then denominator.
If student enters incorrect result, program reports and
gives another chance. On a second error, the program gives
a short tutorial and then another chance. If student still
doesn't answer correctly, program continues on after displaying
correct answer.

APPROXIMATE COST: $7.95

TITLE: Guesstimator Series

SUBJECT: Math   GRADE LEVEL: 4-8
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: The purpose is to teach the student to estimate answers before
working out a problem. Guesstimator A--For each problem, a
rectangle appears which is partly filled at random by the computer.
The student estimates the proportion. Two levels of difficulty.
Guesstimator B--The student moves a pointer to an appropriate
position on a number scale to estimate the proper answer.
The scale of the number line may be changed. Five levels
of difficulty.

APPROXIMATE COST: Each program $14.95 or both $28.40

TITLE: Metric Drill

SUBJECT: Math   GRADE LEVEL: 4-8
SYSTEM: Apple II (Applesoft) 48K (Disk)

DESCRIPTION: This program provides several different modes for
learning metric measures, including: matching metric prefixes to
their values, estimating the measures of common objects, matching
prefixes and units to symbols, and practice converting between
metric units at varying levels of difficulty. Program includes
400 separate problems.

APPROXIMATE COST: $49.95

TITLE: Place Value

SUBJECT: Math **GRADE LEVEL:** 4-8
SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: Program is a tutorial on place value in decimal numbers. The program operates as follows: (1) introduces the decimal system and the values of digits in the one's through 1000's places; gives practice in determining the quantity of one's, ten's, etc., making up a number; introduces the relationship between regular and expanded numbers, e.g., 25 = (2X10) + (5X1), and gives practice with this concept; and gives practice (30 items) determining the value of numerals in each place, eg., what is the value of 5 in 8537? A performance report is given at end.

APPROXIMATE COST: $24.95

TITLE: Stalker

SUBJECT: Math, Basic Functions **GRADE LEVEL:** 4-8
SYSTEM: Apple II Plus 32K 3.3 DOS (Disk)

DESCRIPTION: This is a competitive math game for two players. Game paddles are required. Students select function, degree of difficulty (rank of officers) and size parameters for the numbers in each problem. The number of points to win (1-100) is also selected. Thus the teacher can control the length of the game to some degree. Four problems are shown simultaneously and these can be multiple function problems.

APPROXIMATE COST: Public Domain

TITLE: X Zone

SUBJECT: Math -- Coordinates, Logic **GRADE LEVEL:** 4-8
SYSTEM: Apple II Plus 32K 3.3 DOS (Disk)

DESCRIPTION: Student tries to find the intersections of two hidden lines on a grid. The computer gives color clues after each guess so that the student can made a logical next guess. Requires color monitor.

APPROXIMATE COST: Public Domain

TITLE: Comfrac

SUBJECT: Mathematics   GRADE LEVEL: 4-9
SYSTEM: TRS-80 (Disk)

DESCRIPTION: This program provides drill and practice for converting
 fractions. Fractions are presented on both sides of an equal sum with
 3 of the 4 four parts of the two fractions given. The student provides
 the correct response. The user has two chances to generate an accurate
 value.

APPROXIMATE COST: Public Domain

TITLE: Link Four

SUBJECT: Mathematics (Logic)   GRADE LEVEL: 4-9
SYSTEM: 400/800 8K (Cassette) (paddle controllers required)
 Atari

DESCRIPTION: Link Four is a two-player logic game. The screen displays
 a 6X7 grid of empty boxes. Each player, in turn, tries to place his
 colored square so that he will link 4 of his colored squares together,
 either horizontally, vertically, or diagonally. The user can move only
 horizontally across the top of the column. Once the column has been
 selected the piece drops in the lowest open box. This means that in
 order to position a colored square in the third box from the bottom, the
 2 squares below it must already be filled. Strategy must be planned
 many steps in advance in order to out-maneuver the opponent.

APPROXIMATE COST: $6.95

TITLE: Skill Builder I (Bingo Duel) (Number Hunt)

SUBJECT: Mathematics   GRADE LEVEL: 4-9
SYSTEM: Atari 400/800 8K (Cassette) (Joystick Controlled)

DESCRIPTION: Skill Builder I is a 2-program cassette designed to test
 and improve arithmetic skills. In Bingo Duel, the player may use the
 program alone, with another player, or with the computer. The computer
 puts 25 numbers on the screen to be used as answers to the questions asked
 at the bottom of the screen. The object is to find the answers to the
 math problems faster than the opponent.
      In Number Hunt 3X3 number grids display a cursor for each opponent.
 Each time a player answers correctly both players are given new problems.
 The player who scores 10 correct answers wins the game.

APPROXIMATE COST: $19.95

TITLE:___Spider

SUBJECT:___Mathematics   GRADE LEVEL:___4-10
SYSTEM:___Commodore/PET (Disk)

DESCRIPTION:___Computer is set up to move the cursor in a number of
different directions leaving a trail, much the way a spider leaves an
integrated web.

APPROXIMATE COST:___Public Domain

TITLE:___Arithmetic Racing

SUBJECT:___Mathematics   GRADE LEVEL:___4-11
SYSTEM:___Apple I or Apple II Plus Applesoft 32K DOS 3.2 or 3.3

DESCRIPTION:___This program is a game of timed arithmetic practice for
students. Players select addition, subtraction, multiplication or
division option and specify largest numbers they want the computer to
use. Players also select a need level of from 1-5. A point value is
assigned to each problem, and a 25 point bonus is added to the score
when all 10 questions are answered correctly. Program assumes students
know basic arithmetic facts.

APPROXIMATE COST:___Public Domain

TITLE:___Decimal Division

SUBJECT:___Mathematics   GRADE LEVEL:___4-12
SYSTEM:___Commodore/PET (Disk)

DESCRIPTION:___This program is written in a verbal problem format. Both
decimal numbers are entered by the student. The user--on a note pad--
computes his/her answer and then compares that answer with the correct
response produced by the micro-computer.

APPROXIMATE COST:___Public Domain

TITLE: Elementary Volume 4, MECC

SUBJECT: Mathematics, Science, Logic   GRADE LEVEL: 4-12
SYSTEM: Apple II 48K 3.2 DOS

DESCRIPTION: Diskette contains 6 programs. Estimate is a drill and practice program for estimating answers to problems in 4 basic functions and percents. Math Game is a drill and practice program in the 4 basic operations. Odell Lake and Odell Woods are food web simulations, the first in which the user must take the role of a fish. Solar Division and URSA teach concepts of distance in space and how to tell time by the stars. Good documentation included.

APPROXIMATE COST: $29.95

TITLE: Fred Fraction

SUBJECT: Mathematics (Fractions)   GRADE LEVEL: 4-12
SYSTEM: Apple II 32K DOS 3.3

DESCRIPTION: This program provides drill in all 4 math functions. There are several levels of difficulty selected by user. The program provides immediate feedback, encouragement and prods the user to reduce to lowest common denominator.
    Problems are selected randomly.
    Color graphics are outstanding.

APPROXIMATE COST: Public Domain

TITLE: Add Fast

SUBJECT: Mathematics   GRADE LEVEL: 5-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: This program gives practice in adding. Three levels are established and the user responds to the problems presented at random. Learner rates himself from 1-10 and problems are written accordingly.

APPROXIMATE COST: Public Domain

TITLE: MECC Math. Volume I

SUBJECT: Mathematics   GRADE LEVEL: 5-12
SYSTEM: Apple II 32K 3.2 DOS or 3.3 DOS

DESCRIPTION: Diskette contains 8 programs. Algebra presents simple algebraic equations with good drill and practice. Low level algebra only. Slope focuses on graphing a linear equation. Bagels, Snark and Radar are suitable for younger students who enjoy math and logic. Polar and Polygraph teach functions involving polar coordinates. ICBM teaches the coordinate system.
    Good documentation is provided.

APPROXIMATE COST: $29.95

TITLE: Poker

SUBJECT: Mathematics   GRADE LEVEL: 5-12
SYSTEM: Commodore/PET (Cassette) 16K minimum

DESCRIPTION: Designed to pit the skills of the player against the Computer House. Graphic displays depict: player's bet, draw cards, and bet again. The House is programmed to make moves in accordance with the hand it has been dealt and the nature of the betting which has taken place. The computer evaluates each hand, rearranges the cards appropriately, and displays a summary of each game. Total standings of the House and player are recorded and displayed after each game.

APPROXIMATE COST: $15

TITLE: Archimedes' Apprentice

SUBJECT: Mathematics   GRADE LEVEL: 6-8
SYSTEM: TRS-80 Model I/III 16K (Cassette)

DESCRIPTION: The goal of the Archimedes' Apprentice is to teach the user the formulas for determining the volume of various geometric figures. The two programs cover parallelepipeds, prisms, pyramids, cylinders, cones and spheres.

APPROXIMATE COST: $9.95

TITLE: Algebra Billiards

SUBJECT: Mathematics GRADE LEVEL: 7-9
SYSTEM: TRS-80 Model I 16K (Cassette)

DESCRIPTION: The program gives practice in working algebra substitution problems at the same time a game of billards is going on. The program "racks up" the characters to be used in the upcoming problem, and the student "breaks" by pressing the "C" key (cueball). The characters bounce around and settle into the expression to be evaluated. The values of 2 variables are given. The student is asked to identify the unknown variable and then to direct a series of steps to solve the problem, using unknown values. Student starts with 15 points and loses some at each incorrect response.

APPROXIMATE COST: $16.95

TITLE: Geometry and Measurement Drill & Practice

SUBJECT: Mathematics GRADE LEVEL: 7-12
SYSTEM: Apple II Applesoft 32K DOS (Disk)

DESCRIPTION: This program has practice problems on lengths, areas, perimeters, angles, and volumes of various plane and solid figures. It is intended for students at the basic geometric level.
    It uses high-resolution graphics to emphasize key points and provides short explanations for students having difficulty.

APPROXIMATE COST: $50

TITLE: Gross Pay

SUBJECT: Mathematics GRADE LEVEL: 7-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: This program provides a number of word problems on "pay" for which the user must compute hourly, monthly, regular and over-time payments. Responses are given when the user supplies incorrect responses.

APPROXIMATE COST: Public Domain

TITLE: Junior High School Mathematics Programs

SUBJECT: Mathematics   GRADE LEVEL: 7-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: Individually designed programs to help students work on
developing facilities in dealing with simple multiplication, division
(2-7 digit integers may be involved), addition, subtraction, problem
solution involving proportional relationships of the type: X/a equals b/c,
percent and fraction problems.
    Other programs include: Mode-Median-Mean, Bar Graph Analysis,
decimals and verbal problems.

APPROXIMATE COST: $20 each

TITLE: Add

SUBJECT: Mathematics   GRADE LEVEL: 8-10
SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: This program enables the student to practice adding and
subtracting algebraic binomials. Unlimited problems are presented in-
volving adding and subtracting binomials in horizontal format. The final
answer is entered by the student. If the input is correct, the program
will move to the next problem. Incorrect answers results in the computer
giving the correct answer and moving on to the next problem.

APPROXIMATE COST: $19.95

TITLE: Tic Tac Pet

SUBJECT: Mathematics   GRADE LEVEL: 8-10
SYSTEM: Commodore/PET

DESCRIPTION: The student practices solving linear equations in a game
format. The program presents a Tic Tac Toe board with a linear equation
as well. Two players take turns selecting and trying to solve 3 equations
in a row. Correctly solved equations allows the player's marker to be
placed in the cell. Wrong equations result in the other player's turn.
Yet, if both players are wrong, problem selection passes to the other
player. There are 9 difficulty levels with which the players may choose.

APPROXIMATE COST: $50 for 15 program package

TITLE: Binomial Multiplication

SUBJECT: Mathematics GRADE LEVEL: 8-12
SYSTEM: Apple II or Apple V Plus Applesoft 32K DOS 3.2 or 3.3

DESCRIPTION: Program assumes students are familiar with multiplying monomials, know the distribution property, and understand the concept of area as it relates to the rectangle. Should also have had practice in binomial multiplication. The program demonstrates the product of 2 binomials is a valid process.

APPROXIMATE COST: Unknown

TITLE: Function Grapher

SUBJECT: Mathematics GRADE LEVEL: 8-12
SYSTEM: Apple II or Apple II Plus Applesoft 48K (Disk) DOS 3.2 or 3.3

DESCRIPTION: The menu display offers students the choice of circular (trig) functions, absolute value functions, greatest integer functions, polynomial functions, or student-supplied functions. Regardless of the category once a specific function has been selected students supply each coefficient. To enable an investigation of the role of the coefficients, students may also elect to have the computer graph a second function on the same set of axes.

APPROXIMATE COST: Unknown

TITLE: Reverse

SUBJECT: Mathematics GRADE LEVEL: 8-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: The computer presents a scrambled number-line with digits 0-9. The user must determine how to reverse the arrangement of digits to produce a number-line from 0-9. The different combinations of numbers definitely keep the user on his/her toes.

APPROXIMATE COST: Public Domain

TITLE: _____ Arithmetic of Function _____

SUBJECT: Mathematics   GRADE LEVEL: 9-12
SYSTEM: _____ Apple II or Apple II Plus DOS 3.2 or 3.3 Applesoft 32K
         (Disk)

DESCRIPTION: The program assumes that students have good understanding
and graphic knowledge about various mathematics functions including
algebra, polynomial, trigonometric and logarithmic functions. Program
demonstrates the combining of 2 functions using arithmetic operations
and the resulting effect on the displayed graph.

APPROXIMATE COST: _Unknown_

TITLE: _____ Hicall _____

SUBJECT: Mathematics   GRADE LEVEL: 9-10
SYSTEM: _____ Commodore/PET 8K (Cassette)

DESCRIPTION: The goals of this program are to help students discover
relational patterns between algebraic coefficients and the values
of the expressions in which they appear, and also to give practice in
integer arithmetic and in evaluating expressions.

APPROXIMATE COST: _$5_

TITLE: _____ Linear Equations _____

SUBJECT: Mathematics   GRADE LEVEL: 9-12
SYSTEM: _____ Commodore/PET (Disk)

DESCRIPTION: This program graphs basic linear functions in the format
$AX + BY = C$. A, B, and C are whole numbers. Fractions are not
graphed. There is a 40X20 graphing area; users must limit size of numbers
in the equation for charting on the graph.

APPROXIMATE COST: _Public Domain_

TITLE: <u>Senior High Mathematics Program--I Math Diskette</u>

SUBJECT: Mathematics   GRADE LEVEL: 9-12

SYSTEM: Apple II Plus DOS 3.3

DESCRIPTION: A package of high school mathematics covering the following is available: Quadratic Equations, Trigonometry I, Simultaneous Equations, (2X2) Problems I--Numbers, Verbal Problems II--Coins, Verbal Problems III--Ages, Verbal Problems IV--Interest, Verbal Problems V--Mixtures, Verbal Problems VI--Geometry and Verbal Problems VII--Rates.

APPROXIMATE COST: $180 package

TITLE: Senior High Mathematics Program II Math Diskette

SUBJECT: Mathematics   GRADE LEVEL: 9-12

SYSTEM: Apple II Plus DOS 3.3

DESCRIPTION: This package is similar to I Math Diskette but includes the following areas: Verbal Problems VIII--Digits, Verbal Problems IX--Work, Arithmetic Progressions I, Arithmetic Progressions II, Geometric Progressions I, Geometric Progressions II, Types of Variation, Linear Equations, Formula Evaluation, Coordinate Geometry, Exponents and Logarithms, and Verbal Problems X--General.

APPROXIMATE COST: $180 package

TITLE: Senior High School Methematics Program--Coordinate Geometry

SUBJECT: Mathematics   GRADE LEVEL: 9-12

SYSTEM: Commodore/PET

DESCRIPTION: Enables the student to develop facility in dealing with the elementary concepts of coordinate geometry. The distance between 2 points and the slope and intercept of a line passing through these points are among the concepts being dealt with.

APPROXIMATE COST: $20

TITLE: Senior High School Mathematics Program--Geometric Progressions I

SUBJECT: Mathematics   GRADE LEVEL: 9-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: Enables the student to develop facility in dealing with the various geometric progressions. The common ratio, nth term, and geometric mean are 3 of the components being dealt with.

APPROXIMATE COST: $20

TITLE: Senior High School Mathematics Program--Trigonometry II

SUBJECT: Mathematics   GRADE LEVEL: 9-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: Enables the student to develop facility in dealing with the properties of a right triangle and the 6 basic trig functions: sine, cosine, tangent, cosecant, secant, and cotangent.

APPROXIMATE COST: $20

TITLE: Senior High School Mathematics Program--Verbal Problems I

SUBJECT: Mathematics   GRADE LEVEL: 9-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: Enables the student to develop facility in dealing with the solution to verbal problems involving relationships. The student must construct, from a statement of the problem, an algebraic equation which then proceeds to solve for the unknown.

APPROXIMATE COST: $20

TITLE: Euclid Geometry Tutor

SUBJECT: Mathematics　　　　　　　　　　GRADE LEVEL: 10-12
SYSTEM: TRS-80 Model I/III 16K (Cassette)

DESCRIPTION: Program is designed to reinforce basic geometry concepts introduced by the teacher. Students develop proofs using 9 basic postulates of Euclidean Geometry. The program has 1 of 3 difficulty levels. In the second, the student enters statements, and the computer gives the reasons justifying the statement. In the third mode, the student provides both statements and reasons.

APPROXIMATE COST: $39.95

TITLE: Proofs and Properties

SUBJECT: Mathematics (geometry)　　　　GRADE LEVEL: 10-12
SYSTEM: Apple II Applesoft 3.2 or 3.3 DOS 32K (Disk)

DESCRIPTION: This program practices concepts used in doing geometric proofs. Proofs and properties presents a series of questions and problems on first semester geometry with emphasis on proofs and proving and the critical relational properties. It is designed to be run without external documentation. The disk is protected against copying and modification.

APPROXIMATE COST: $29.95

TITLE: Introductory Calculus

SUBJECT: Mathematics　　　　　　　　　　GRADE LEVEL: 11-12
SYSTEM: Apple II Plus or Commodore (Disk)

DESCRIPTION: The following programs are designed to support an introductory calculus course: Differentiation Algebraic Functions, Maxima/Minima Problems Part I, Maxima/Minima Problems Part II, Relative Problems Part I, Relative Rates Problems Part II, Integration of Algebraic Functions, Differentiation of Trigonometric Functions, Integration of Trigonometric Functions, Integration: Areas of Plane Figures, Integration: Volumes of Solids, Integration: Arc Lengths, and Integration: Surface Areas of Solids.

APPROXIMATE COST: $180 package

TITLE: Limacons and Their Areas

SUBJECT: Mathematics   GRADE LEVEL: 11-12

SYSTEM: Apple II or Apple II Plus Applesoft (Disk) 32K 3.2 DOS or 3.3 DOS

DESCRIPTION: The program assumes students understand polar coordinates, polar graphicing techniques, radian measure of angles and the functions sine (t) cos (t) and their graphs. The program demonstrates the curves formed by r=A+B cos (t) and r=A+B sin (t); to demonstrate graphically the effects of changing A and B in these equations.

APPROXIMATE COST: Unknown

TITLE: Limits of Sequences

SUBJECT: Mathematics   GRADE LEVEL: 11-12

SYSTEM: Apple II Plus 32K DOS 3.2 or 3.3 Applesoft

DESCRIPTION: The program graphically displays approximately 55 terms of a sequence. The epsilon neighborhood of the limit is drawn with the value of epsilon. The threshold value, M, is then computed and printed. The 5 menu selections enable the user to choose a suggested sequence or to specify his/her own sequence choice.

APPROXIMATE COST: Unknown

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: _Clef Drill_

SUBJECT: Music   GRADE LEVEL: 3-8
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: This program includes 4 different clefs--bass, alto, tenor
and treble. Student practices identifying notes in the selected clef.
Student can select the number of notes on which he/she desires to work.

APPROXIMATE COST: Public Domain

TITLE: Music Composer

SUBJECT: Music   GRADE LEVEL: 3-12
SYSTEM: Atari 400/800 (Cartridge)

DESCRIPTION: The Music Composer cartridge turns the computer into a
programmable musical instrument. It is capable of playing up to 4 simul-
taneous notes in a 3 octave range through the TV speaker. Has a 20-page
instruction manual.
     To use the program, the user must first write his/her music. This is
done by the use of the "Edit Music" function. The user is allowed up to
10 "phrases" with as many measures per phrase as desired. Notes are
entered on a displayed staff in a "note letter," "octave number," "note
duration" format. After the user has edited and arranged his/her music,
it can be listened to or saved. Program does have several limitations.

APPROXIMATE COST: $59.95

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: Sunday Golf

SUBJECT: Physical Education   GRADE LEVEL: 4-10
SYSTEM: Atari 400/800 8K (Cassette)

DESCRIPTION: Sunday Golf is a game simulation of a 9-hole golf course, complete with sand traps, roughs, and terrain. Up to 4 "golfers" can play, choosing the Long or Short Course option. Of course, the object is to complete the course with as few strokes as possible.
    Each hole is designed randomly by the computer, with distance and par displayed. The user must determine which club to use--woods (4), irons (9) or wedge. The beginning instructions show the approximate yardage capability of each club and the units used to determine the direction of hit.

APPROXIMATE COST: $9.95

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: Preschool Fun

SUBJECT: Reading   GRADE LEVEL: Preschl.-1
SYSTEM: Atari 400/800 8K (Cassette)

DESCRIPTION: Preschool Fun is a 2-program cassette designed to help teach the preschooler colors, numbers, shapes, letters (both capital and small), and directions (left, right, up, down). Along with all that, the package can also be used to introduce computers to young children.
     The ideas in the package are presented in a similar format for the non-reading child. The format first prompts the child with the correct answer, then asks the child to determine the answer on his/her own.

APPROXIMATE COST: $15

TITLE: Letters and Numbers

SUBJECT: Reading   GRADE LEVEL: K-1
SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: The program drills students on number and letter recognition. Letters and numbers presents exercises for upper and lower-case letters and numbers. The user may choose among exercises to drill via matching, sequence completion, and filling in the character. Upper-case letters can be matched with lower-case letters, and vice versa. Characters are displayed in large sizes.

APPROXIMATE COST: $20

TITLE: Speed Reading & Comprehension

SUBJECT: Reading   GRADE LEVEL: 2-12
SYSTEM: Commodore/PET 16K (Cassette or Disk)

DESCRIPTION: The student reads text passages which are followed by comprehension tests. A rapid scan of a text passage is presented, followed by a line-by-line presentation of the same text for reading. Lastly, a multiple-choice quiz is given to measure the student's comprehension. The speed of text presentation may be increased or decreased by the reader while reading is going on and without stopping the program. The reader's speed and comprehension level is reported after the end of each session.

APPROXIMATE COST: 6 program cassette $49.94 disk $59.95

TITLE: __Reading Programs__

SUBJECT: Reading   GRADE LEVEL: __3-6__
SYSTEM: __Commodore/PET (Disk)__

DESCRIPTION: A series designed to master basic word attack patterns for dependable sound/symbol correspondence. 1,000 words taught in the series. "Of", "to" and "the" do not have a regular correspondence. Begins with a sentence on the screen for the student to type. Correct responses are reproduced and reinforced. The learner pronounces each word and is monitored. The screen clears after sentence is typed for the first time, then reappears with a word missing. Sentence is typed again and reappears with another part missing. Eventually, the learner types the entire sentence from memory. Performance is summarized.

APPROXIMATE COST: __Complete set of 4 Type to Read Programs $511.75__

TITLE: __Critical Reading, Microsystem 80__

SUBJECT: __Reading/Logic__   GRADE LEVEL: __4-8__
SYSTEM: __Apple II 48K 3.3 DOS (Printer for management only)__

DESCRIPTION: This is a supplemental reading program with special assistance for students who are low in comprehension. In simple to fairly complex paragraphs the user must eliminate the "or" statement or the "and" statement. Ultimately, the student is introduced to several rules of inference.

      Good instructions and documentation.

APPROXIMATE COST: __$750 (lease option)__

TITLE: __Comprehension Power Program__

SUBJECT: __Reading__   GRADE LEVEL: __4-12__
SYSTEM: __Apple II Plus 48K DOS 3.3__

DESCRIPTION: 108 reading selections. Each level consists of 12 lessons on 4 diskettes. Step 1: Vocabulary Introduction: The student reviews the key words in context sentences. Step 2: The student displays segment of a reading selection in a preview allowing time to read, comprehend, and assimilate before displaying the next segment. At the end of the preview, 2 questions are presented and the student is given immediate feedback on both. Step 3: The student sets a reading rate and reads the selection as it is displayed. Each segment is followed by 1-3 comprehensive questions. Comprehension skills include: literal understanding, interpretation, analysis, evaluation, and appreciation.

APPROXIMATE COST: __$150__

TITLE: Odell I

SUBJECT: Science   GRADE LEVEL: 4-10
SYSTEM: Apple II 48K (Disk)

DESCRIPTION: Program assumes that students have been introduced to
food chains and webs and provided with definitions of necessary terms.
Helps students to understand the concept of food web. Further, the
program explains the role of each animal and indicatesthe effects of man
on lake and lake on man. Defines words related to food web.

APPROXIMATE COST: Unknown

TITLE: Science, Volume 3, MECC

SUBJECT: Science   GRADE LEVEL: 5-8
SYSTEM: Apple II 32K 3.3 DOS

DESCRIPTION: Diskette contains 5 separate lessons. Odell Lake and URSA
are same simulation as on Elementary Volume 4. Quakes is a simulation
demonstrating how to locate an earthquake epicenter. Fish is a graphic
demonstration of the circulatory system of an animal with a 2-chamber
heart. Minerals puts the user in the role of scientist searching out
an unknown mineral.
     Documentation is good.

APPROXIMATE COST: $29.95

TITLE: Life Expectancy

SUBJECT: Science   GRADE LEVEL: 5-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: This program includes a number of questions to which the
user responds. The questions are similar to those raised by life-insur-
ance companies when plotting life-expectancies. The program concludes
with a projection of life-expectancy based upon entries.

APPROXIMATE COST: Public Domain

TITLE: Pool

SUBJECT: Science **GRADE LEVEL:** 6-9
SYSTEM: TRS-80 (Disk)

DESCRIPTION: The display screen shows a 1-pocket pool table. The user notes the location of the ball on the table and makes guesses about the angel the ball must bounce off the rail to proceed into the pocket. Cues are presented to help the student know where the ball will strike. Helps to demonstrate the principle of refraction. Score is maintained by the computer.

APPROXIMATE COST: Public Domain

TITLE: Polut

SUBJECT: Science/Ecology **GRADE LEVEL:** 6-10
SYSTEM: Commodore/PET 32K (Disk)

DESCRIPTION: Program allows students to investigate a body of water undergoing pollution. Several different types of water bodies, from a small pond to a fast moving stream, may be studied. Students are to vary several factors and to see effects on pollution and dissolved oxygen levels in the water; the factors include temperature, type of pollutant, and type of treatment the pollutant receives before entering the water. Effects are reported in a table, a graph, or both.

Documentation (available separately) includes a teacher's guide, a student workbook, and a resource handbook.

APPROXIMATE COST: $50

TITLE: Tari Trek

SUBJECT: Science **GRADE LEVEL:** 6-12
SYSTEM: Atari 24K (Cassette) and 32K (Diskette)

DESCRIPTION: Get ready for an exciting trek through space. Your mission is to rid the galaxy of Klingon warships, and to accomplish this you must use strategy to guide the starship Enterprise around stars, through space storms, etc. At the higher levels, users play against elapsed time.

APPROXIMATE COST: Cassette $11.95 Diskette $14.95

TITLE: __The Atom__

SUBJECT: __Science__   GRADE LEVEL: __7-12__

SYSTEM: __Commodore/PET 16K (Disk)__

DESCRIPTION: __Text, tables and graphics are used to present the basic principles of atomic structure. Protons, electrons, neutrons, and the atomic number and weight of atoms are introduced and the student is asked to apply the principles learned. The questions are randomly selected from a bank of 30.__

APPROXIMATE COST: __$14.95__

TITLE: __Pop__

SUBJECT: __Science: Biology__   GRADE LEVEL: __7-12__

SYSTEM: __Commodore/PET 32K (Disk)__

DESCRIPTION: __This program allows students to examine the population dynamics of simple organisms. The simulation allows students to investigate 3 different population growth models: exponential, logistic, and logistic modified for low density. It enables one to explore the effects of reproductive rates, high and low population densities, and initial population growth. The student specifies parameters and then the program graphs population over time. Up to 4 graphs may be superimposed to permit comparison of effects. Documentation (available separately) includes a teachers guide, a student workbook, and a resource handbook.__

APPROXIMATE COST: __$50__

TITLE: __Human Eye__

SUBJECT: __Science__   GRADE LEVEL: __8-12__

SYSTEM: __TRS-80 (Disk)__

DESCRIPTION: __A graphic representation of the human eye is placed on the display screen with numbers marking the various parts of the eye. The user is given the name of the part of the eye and responds by indicating the corresponding number. Program is written to give the user an unlimited opportunity to select the correct response.__

APPROXIMATE COST: __Public Domain__

TITLE: Human Heart

SUBJECT: Science   GRADE LEVEL: 8-12
SYSTEM: TRS-80 (Disk)

DESCRIPTION: A graphic representation of the human heart is placed on
the display screen with numbers marking the various parts of the heart.
The user is given the name of a part of the heart and responds by in-
dicating the corresponding number. Program is written to give the user
an unlimited opportunity to select the correct response.

APPROXIMATE COST: Public Domain

TITLE: Crypto

SUBJECT: Science   GRADE LEVEL: 9-12
SYSTEM: Commodore/PET 8K minimum (Cassette)

DESCRIPTION: Designed to create cryptograms from various lines of text
which are entered by the students. Either a second player or the computer
will decipher the message when a code number is entered.

APPROXIMATE COST: $15

TITLE: Density

SUBJECT: Science   GRADE LEVEL: 9-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: The user is offered a number of opportunities for drill and
practice in computing density and volume. The student enters both values
and then checks his/her answers against the computer generated answer. A
note pad for personal computations is required.

APPROXIMATE COST: Public Domain

TITLE: Electronics

SUBJECT: Science   GRADE LEVEL: 9-12
SYSTEM: TRS-80 Model I

DESCRIPTION: This program tests a student's knowledge of the Ohm's Law
and calculating I and R. This program assumes that the student knows
Ohm's Law thoroughly. No instructions are given on it. Immediate
reinforcement is given.

APPROXIMATE COST: $24.95

TITLE: Genetics

SUBJECT: Science   GRADE LEVEL: 9-12
SYSTEM: Commodore/PET 16K (Disk)

DESCRIPTION: This program presents a 3-generation family tree with
specific genetic traits. The learner is then asked whether the trait is
caused by a dominant, recessive, or sex-linked gene. If an incorrect
answer is given, the student has the option of getting an explanation
supplied by the computer.

APPROXIMATE COST: $20

TITLE: Tellstar

SUBJECT: Science (Astronomy)   GRADE LEVEL: 9-12
SYSTEM: Apple II Applesoft 48K (Joystick & Printer) (Disk)

DESCRIPTION: Tellstar shows actual celestial bodies visible at any
specific place and time specified by the user. It also provides data
on any requested body.

APPROXIMATE COST: $39.95

TITLE: Weatherman

SUBJECT: Science   GRADE LEVEL: 9-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: There are 4 computation programs contained in this package:
1) Temperature Conversion, e.g. Celsius, Fahrenheit, Kelvin and Rankine.
2) Temperature/Humidity Index
3) Wind Chill Equivalent Temperatures.
4) Relative Humidity and Dew Point.
     Separate computation note pad is necessary.

APPROXIMATE COST: Public Domain

TITLE: Energy and the Inclined Plane

SUBJECT: Science (Physics)   GRADE LEVEL: 10-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: Generates a series of 10 questions dealing with the analysis
of the motion of a particle on an inclined plane. The concepts of work,
kinetic energy and potential are thus reviewed.

APPROXIMATE COST: $20

TITLE: Kinematics

SUBJECT: Science (Physics)   GRADE LEVEL: 10-12
SYSTEM: Commodore/PET 8K (Cassette)

DESCRIPTION: This program gives practice in computating questions re-
garding velocity, average acceleration, and distance travelled. The
student answers questions from a graph or from their own computations.
If the answer is incorrect the first time, the program either tells the
student to check the graph or gives the student the relevant formula.
On a second error, it displays the formula, computations, and final
answer, then goes on to the next question.

APPROXIMATE COST: $20

TITLE:___Naming Compounds

SUBJECT: Science   GRADE LEVEL:___10-12

SYSTEM:___Commodore/PET (Disk)

DESCRIPTION: Users are either given the name of a compound and are asked
 to supply the correct formula or they are given a formula and asked to
 supply the name of the compound. Score is kept by the computer and
 summarized at the conclusion of the program.

APPROXIMATE COST: Public Domain

TITLE:___Physics Compulab

SUBJECT: Science (Physics)   GRADE LEVEL:___10-12

SYSTEM: Apple II Plus 48K (Disk)

DESCRIPTION: Six computer-simulated experiments that enable students to
 experimentally investigate concepts and phenomena that are difficult or
 impossible to investigate in a conventional lab. Students make measure-
 ments of simulated events in the same way they measure real events, so
 these experiments can be used in conjunction with conventional experiments
 to evaluate the students' overall laboratory experience.

APPROXIMATE COST: $495 - 6 diskettes, six manuals, one guide

TITLE:___Physics Programs I

SUBJECT: Science (Physics)   GRADE LEVEL:___10-12

SYSTEM: Apple II Plus or Commodore (Disk)

DESCRIPTION: This series of programs includes practice and problems on
 such topics as: Linear Kinematics, Projectile Motion, Momentum and Energy,
 Energy and the Inclined Plane, Inelastic Collisions, Centripetal Force,
 Pulley System-Machines, Vector Analysis I, Vector Analysis II, Projectile
 Analysis and Calorimetry Analysis.

APPROXIMATE COST: $180

TITLE: ___Physics Program II___

SUBJECT: _Science (Physics)_   GRADE LEVEL: ___10-12___

SYSTEM: _Apple II Plus or Commodore (Disk)_

DESCRIPTION: _This series of programs includes practice and problems on_
such topics as: Specific Gas Laws, General Gas Law, Thermodynamics I,
Thermodynamics II, Transverse Standing Waves, Longitudinal Standing
Waves, Mirrors and Lenses, Refraction of Light, Series Circuit Analysis,
Parallel Circuit Analysis I, Parallel Circuit Analysis II, Series/Parallel
Analysis, Electric Field Analysis, Photoelectric Effect, Projectile Analy-
sis.

APPROXIMATE COST: _$180_

TITLE: ___Pulley-System Machines___

SUBJECT: _Science (Physics)_   GRADE LEVEL: ___10-12___

SYSTEM: _Commodore/PET (Disk)_

DESCRIPTION: _Generates a series of 7 questions dealing with the analysis_
of a pulley system consisting of a single, double, or triple fixed and
moveable blocks. The concepts of work and efficiency are thus reviewed.

APPROXIMATE COST: _$20_

TITLE: ___Stoichiometry: General___

SUBJECT: _Science (Chemistry)_   GRADE LEVEL: ___10-12___

SYSTEM: _Commodore/PET (Disk)_

DESCRIPTION: _Generates a series of questions dealing with stoichiometric_
relationships in chemical reactions. Mass/mass, mass/volume, and volume/
volume problem types are randomly generated.

APPROXIMATE COST: _$20_

TITLE: Symbols and Valences Drill

SUBJECT: Science (Chemistry)   GRADE LEVEL: 10-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: Students are given practice in learning the symbols and
 valences of the common ions and radicals encountered in elementary
 courses.

APPROXIMATE COST: $20

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE:

SUBJECT: GRADE LEVEL:
SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: Picture Kingdom

SUBJECT: Social Studies   GRADE LEVEL: 4-9

SYSTEM: Commodore/PET (Disk)

DESCRIPTION: This simulation game is played by having the user act as a ruler, e.g., king or queen. By manipulating food production--with a changing population--in light of rats, disorders, attacks by Huns, etc., the ruler has to make well-calculated decisions.

APPROXIMATE COST: Public Domain

TITLE: States & Capitals

SUBJECT: Social Studies   GRADE LEVEL: 4-10

SYSTEM: Atari 400/800 (Cassette)

DESCRIPTION: States and Capitals is a learning game to test and improve knowledge of both the states and their capitals and their geographic location. A map of the United States is drawn and a state is outlined. The object is to first name the state and then its capital, spelling both correctly. The number of correctly identified states and capitals are shown throughout the game.

APPROXIMATE COST: $14.95

TITLE: States

SUBJECT: Social Studies   GRADE LEVEL: 4-11

SYSTEM: TRS-80 (Disk)

DESCRIPTION: This program is designed to show the geographic location on a map of the United States. The location of the state capital is Students are asked to name the capital and the state. The student can elect to try his/her skill by giving the correct responses in alphabetical or random order.

APPROXIMATE COST: Public Domain

TITLE: Edu-Disks (Readers Digest)

SUBJECT: Social Studies - Problem Solving   GRADE LEVEL: 5-8
SYSTEM: Apple II Plus, Atari, TRS-80

DESCRIPTION: Teaches techniques in logical thinking and decision-making at grade levels 5-8. Highly interactive, it allows the learner to move comfortably from the concrete to the abstract. Problem-solving enhances a mathematics and science curriculum and, because problem-solving is so intimately associated with the interpretation of words, can well serve to enrich an English or reading curriculum.

APPROXIMATE COST: $174.96 - Level 5-6
                  $174.96 - Level 7-8

TITLE: Africa & Asia

SUBJECT: Social Studies   GRADE LEVEL: 5-9
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: This program offers the user a matching exercise to connect capitals with countries in Africa and Asia. The user is given two opportunities to answer with the correct response. The program will not advance until the user has given the correct response and provided the correct spelling of the capital.

APPROXIMATE COST: Public Domain

TITLE: State Guess

SUBJECT: Social Studies   GRADE LEVEL: 5-10
SYSTEM: TRS-80 Model I/III 16K (Cassette)

DESCRIPTION: In this program, the student is to first choose a state and then answer questions which are posed in the program. If the student identifies the correct answer, the session is over. If not, the program asks for the state's name and the computer will either identify the problem as a spelling error (says it never heard of that state) or as an incorrect answer to one of the questions asked previously by the program; this ends the run.

APPROXIMATE COST: $24.95

TITLE: Foreign Capitals

SUBJECT: Social Studies   GRADE LEVEL: 7-10
SYSTEM: TRS-80 Model I 16K (Cassette)

DESCRIPTION: This is a program that gives students practice in matching
countries and their capitals. A list of 50 countries are displayed on
the screen with the name of a capital at the bottom. The student enters
the number of the country of the capital shown. If correct, a new capital
appears. If incorrect, the student keeps trying (unlimited trials).
There are two options: 1) all countries remain displayed throughout a
session, and 2) those correctly matched with a city are removed.
Performance is reported after all countries are correctly matched.

APPROXIMATE COST: $9.95

TITLE: Geography

SUBJECT: Social Studies   GRADE LEVEL: 7-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: This program is set up in such a way that it contains the
names of states, countries, and major cities. The student is asked to
enter a new name that begins with the last letter of the preceding
answer. Student competes against the computer. Spelling is important.

APPROXIMATE COST: Public Domain

TITLE: World Capitals

SUBJECT: Social Studies   GRADE LEVEL: 7-12
SYSTEM: Commodore/PET (Disk)

DESCRIPTION: The program has two different formats and the student works
on one format or the other at any one time. One format gives the name of
the capital and the student is to respond with the correct country rep-
resented. The second format provides the country and the student is to
respond with the name of the captial.

APPROXIMATE COST: Public Domain

TITLE: Water

SUBJECT: Social Studies   GRADE LEVEL: 8-10
SYSTEM: Commodore/PET 32K (Disk)

DESCRIPTION: The basic concept of this program is for the student to
acquire some skills in the area of managing water resources in a small
town. The student manages many factors in a town threatened by imminent
drought in order to try to save the town. Student has control over
such factors as flow of water, availability of food, industrial goods,
current population and budget. The program runs in simulated "real
time" and the student must make decisions "on the fly."

APPROXIMATE COST: $50.00

TITLE: Energy Czar

SUBJECT: Social Studies   GRADE LEVEL: 8-12
SYSTEM: Atari 400/800 16K (Cassette)

DESCRIPTION: In this simulation, the player (the Czar) has the
power to control energy forms. The Czar can enact legislation
to promote or restrict various energy supplies. The Czar controls the
nation's economy. The Czar begins his reign in 1980 and enacts
legislation for a five year period. Included is an instruction
manual.

APPROXIMATE COST: $14.95

TITLE: Hail To The Chief

SUBJECT: Social Studies   GRADE LEVEL: 8-12
SYSTEM: TRS-80 48K DOS (Disk)

DESCRIPTION: In this program, the student tries to be elected President
of the U.S. S/he decides on a particular strategy and executes it, week
by week. Student must make various decisions including what position to
take on a variety of issues such as energy policy, what to do about
unemployment, women's rights, health, mid-east policy and SALT. Candid-
ates must manage financial aspects of their campaign including fund
raising and expenditures. Total package includes four models of
varying complexity. Each model comes in ten different levels of
difficulty. Problems of campaign finance are introduced at the
upper levels.

APPROXIMATE COST: $24.95

TITLE: ___Wall Street Challenge___

SUBJECT: Social Studies   GRADE LEVEL: 8-12

SYSTEM: ___Atari 400/800 8K and 16K (Cassette)___

DESCRIPTION: Wall street challenge is a computer simulation game of the stock exchange. The player has the opportunity to buy and sell 8 different stocks. The player starts with $50,000 and must decide how much of which stock he wishes to purchase. A chart of the recent activity of each stock is available for study, as well as a chart of the recent overall action of the Dow-Jones average. Fortunes can be made and lost as the Dow Jones average and the individual stock's values rise and roll.

APPROXIMATE COST: ___$14.95___

TITLE: ___MECC, Social Studies, Vol 2___

SUBJECT: Social Studies   GRADE LEVEL: 9-12

SYSTEM: ___Apple II Plus 32K, 3/3 DOS (Disk)___

DESCRIPTION: Diskette contains eight programs. Bargain introduces user to the collective bargaining process. Continent gives practice in naming countries and continents. Country, States and States 2 are similar programs. Crisis and Fail Safe are dramatic simulations that provide decision-making opportunities in an highly stressful situation. Minnag may best be used as an example of an information retrieval **system** using a micro-computer

APPROXIMATE COST: ___$29.95___

TITLE: ___New World Explorers___

SUBJECT: Social Studies   GRADE LEVEL: 9-12

SYSTEM: ___TRS-80 (Level II BASIC) 32K (Disk)___

DESCRIPTION: New World Explorers is a simulation of an early explorer's voyage to a new world. Class is divided into teams which work cooperatively, making daily navigation decisions and mapping out the world as it is discovered.

    It is up to each team to discover and map out a new world and to return home safely. Each team takes charge of a boat and must make decisions according to daily navigation and exploration based on information provided by the computer. Students use accompanying booklets. Students learn various simulation experiences and skills such as mapping, compass angles, latitude and longitude and record-keeping.

APPROXIMATE COST: ___$150.00___

TITLE: President's Quiz

SUBJECT: Social Studies   GRADE LEVEL: 9-12

SYSTEM: Commodore/PET (Disk)

DESCRIPTION: The student is presented with a statement indicating the years the President was in office, e.g., 1865-1869. The student is then asked to give the name of the President (first and last name) that matches the corresponding years. The program is designed to allow two incorrect responses before the correct information is placed on the display screen.

APPROXIMATE COST: Public Domain

TITLE: U.S. Constitution Tutor

SUBJECT: Social Studies   GRADE LEVEL: 9-12

SYSTEM: Apple II 48K (Disk)

DESCRIPTION: Aids students who must pass an exam for graduation, immigration, or teacher's certificate. After selecting any answer for the 175 questions, an explanation follows to discuss why the answer was correct or incorrect. Questions are divided into levels of difficulty for beginner, intermediate, and advanced.

APPROXIMATE COST: $30.00

TITLE:

SUBJECT: GRADE LEVEL:

SYSTEM:

DESCRIPTION:

APPROXIMATE COST:

TITLE: ___Word Families___

SUBJECT: _Spelling/Reading_____ GRADE LEVEL: _Pri-Sp. Ed./_
SYSTEM: _Apple II Plus 32K 3.2DOS_____

DESCRIPTION: _This is a small program with limited usefulness._
Essentially the computer asks the user to substitute one letter
which would make a new word from the original word shown on the
screen. Student needs some knowledge of basic sight words.

APPROXIMATE COST: ___$29.95_____

TITLE: Spell 'N Time

SUBJECT: Spelling_____ GRADE LEVEL: 1-12____
SYSTEM: Apple 16K (Applesoft) (Cassette)_____

DESCRIPTION: _This program is a timed spelling drill on teacher-_
selected words. The word blinks inside a box and the student
spells the word by typing it in another box. Incorrect spelling
causes the word to blink inside the box by syllables. If the
word is still misspelled, it remains in the first box as the
student types it in the second box.

APPROXIMATE COST: ___$12.95_____

TITLE: ___Word Challenger___

SUBJECT: Spelling_____ GRADE LEVEL: 3-7_____
SYSTEM: TRS-80 Model I/III 16K (Cassette)_____

DESCRIPTION: _This is a Hangman-like game in which one or two_
players try to guess a hidden phrase, one letter at a time. The
phrases are supplied by the computer in one-player games or by
the opponent if two are playing. The program keeps score as
the game progresses, deducting 2 points for each incorrect consonant
and 10 points for vowels not in the phrase. The program uses
sound and graphics extensively.

APPROXIMATE COST: ___$9.95_____

TITLE: Compu-Spell

SUBJECT: Spelling   GRADE LEVEL: 4-8
SYSTEM: Apple II Plus   48K   DOS 3.3 (Disk)

DESCRIPTION: A positive reinforcement system designed for classroom
usage Compu-Spell features many of the most frequently misspelled
words in the English language. (Each contains about 800-1200
spelling words displayed in sentences.)

APPROXIMATE COST: $29.95

TITLE: Spell Endings

SUBJECT: Spelling   GRADE LEVEL: 4-9
SYSTEM: Commodore/PET   (Disk)

DESCRIPTION: The student is given a number of words picked at
random by the computer and then the user is to apply the correct
ending, e.g., ing, ed, or plurals. The program will repeat
those endings that are incorrect. Correct and incorrect totals
are summarized at the conclusion of the program.

APPROXIMATE COST: Public Domain

TITLE: Spelling Rules

SUBJECT: Spelling   GRADE LEVEL: 5-8
SYSTEM: Apple II (Applesoft) 32K 3.2 or 3.3 DOS (Disk)

DESCRIPTION: Introduces six common rules for use in spelling
English words and provides practice and mastery testing in their
use. The rules cover: the use of ie and ei; when to use a final
e; adding k; final consonants; suffixes cede, ceed, and sede; when
to use a final y.

APPROXIMATE COST: $29.95

TITLE: ___The Word Market_____

SUBJECT: _Spelling_____ GRADE LEVEL: _7-8_
SYSTEM: ___Commodore/PET___(Disk)_____

DESCRIPTION: _This program is in game format and helps students_
___work on spelling, especially ei and ie words. Students earn_
___dollar-points when words are spelled correctly. Record at_
___end of the exercise indicates to students how well the lesson_
___was challenged._

APPROXIMATE COST: _____Public Domain_____

TITLE: ___Junior/Senior High Spelling Programs_____

SUBJECT: _Spelling_____ GRADE LEVEL: _7-12_
SYSTEM: __Commodore/PET____'Disk)_____

DESCRIPTION: _Each spelling program consists of 60 words. The_
___computer randomly selects eight groups of five words. Any one of_
___these five words may be spelled incorrectly. The student is_
___then asked to choose the word misspelled. After a second incorrect_
___response the computer identifies the correct choice and spells_
___it correctly._

APPROXIMATE COST: _____12 programs in all--each $20.00___
_____Total Pakcage--$180.00_____

TITLE: _____

SUBJECT: _____ GRADE LEVEL: _____
SYSTEM: _____

DESCRIPTION: _____

APPROXIMATE COST: _____